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Corrigendum to "Probabilistic surrogate modeling of damage equivalent loads on onshore and offshore wind turbines using mixture density networks" published in Wind Energ. Sci., 9, 1885–1904, 2024

Deepali Singh, Richard Dwight, and Axelle Viré

Faculty of Aerospace Engineering, Delft University of Technology, Kluyverweg 1, 2629HS Delft, the Netherlands

Correspondence: Deepali Singh (d.singh-1@tudelft.nl)

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The above-mentioned paper contains an error for damage equivalent load calculation introduced in the initial submission. Although the conclusions of the study remain unchanged, the corrected equation and additional information about the load signal frequency are presented below.

Equation (17) in Sect. 3.3 (p. 1892) of the paper is missing a summation sign in the numerator. The corrected Eq. (17) is

$$\mathrm{DEL}^{\mathrm{ST}} = \left(\frac{\sum n_i S_i^m}{n_{\mathrm{ref}}} \right)^{1/m}. \tag{17}$$

We expand on Sect. 3.3 (p. 1892) with the following information about the frequency of the load signal used to calculate the $\mathrm{DEL}^{\mathrm{ST}}$ values:

> The $\mathrm{DEL}^{\mathrm{ST}}$ values were computed using a down-sampled load signal at 1 Hz. This choice was made to save time, memory, and space during pre-processing, given the large scale of the database. While this lower sampling frequency captures the dominant contributors to the fatigue, it limits the contribution of the higher-frequency harmonics, resulting in overall lower $\mathrm{DEL}^{\mathrm{ST}}$ values compared to those obtained from higher-frequency load signals. Expert feedback suggests that a sampling frequency in the range of 25–40 Hz would be more appropriate to capture the full spectrum of fatigue-relevant dynamics. We therefore recommend this frequency range for future studies while training the model. Nonetheless, further analysis confirms that the surrogate model's performance is not affected by the minor discrepancies in the $\mathrm{DEL}^{\mathrm{ST}}$ values arising from down-sampling.