

Correction: On the Noise Generation Mechanisms of Side-by-Side Rotors Operating Near Ground

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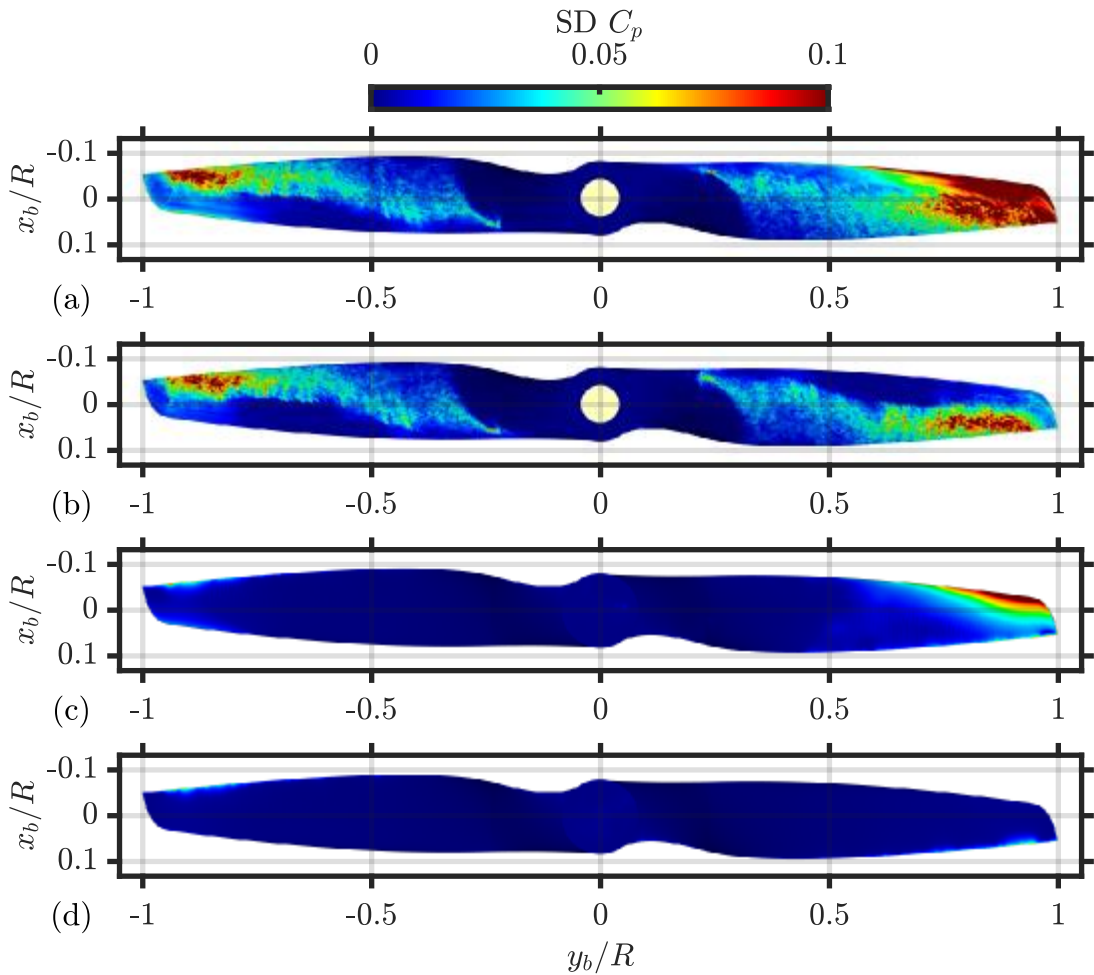


Correction: [On the Noise Generation Mechanisms of Side-by-Side Rotors Operating Near Ground]

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Correction Notice

1. The vertical axis ticks in the subfigures of Fig 10 should be reverted to align with the global coordinate system of the simulation domain. The updated figure is presented below. Not the one presented in the original manuscript.



2. The first sentence in the caption of Fig 14 should be replaced as:
Comparison of the SPL spectra for the results generated from (a, c) the total and (b, d) the single rotor only, between IIGE and DIGE for the fluid probes at the first row $\theta = 45^\circ$ and the second row $\theta = 90^\circ$.

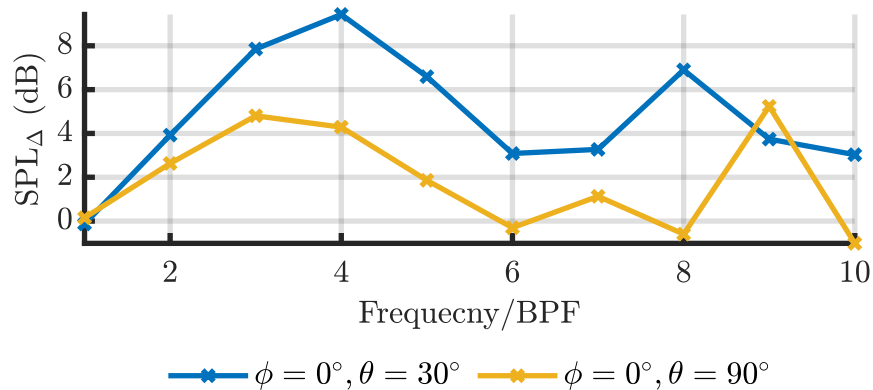
Not the one presented in the original manuscript:
Comparison of the SPL spectra for the single rotor only between IIGE and DIGE for the fluid probes at (a) $\theta = 45^\circ$, (b) $\theta = 90^\circ$.

3. The subfigures are incorrectly labeled with the corresponding polar angles in the caption of Fig 16. The revised one should be:
Contributions to OSPL from the rotors and the ground plane in azimuthal direction at various polar angles, (a) $\theta = 30^\circ$, (b) $\theta = 45^\circ$, (c) $\theta = 60^\circ$ and (d) $\theta = 90^\circ$. Results are in DIGE from a fine grid simulation with $y^+ = 3.5$.

Not

(a) $\theta = 30^\circ$, (b) $\theta = 65^\circ$, (c) $\theta = 90^\circ$.

4. I apologize for the incorrect data used to generate Fig. 17 due to errors in the post-processing code. Please use the revised figure shown below instead of the one presented in the original manuscript.



Because of the update of Fig 17, the description in the last paragraph of page xiii should be changed. Specifically for the last two sentences should be:

The results show that relatively larger enrichment values of SPL are observed at a polar angle of $\theta = 30^\circ$, with an average SPL_Δ value of 4.77 dB over the first 10 BPF tones and a maximum value of nearly 10 dB at the 4th BPF tone. Conversely, at $\theta = 90^\circ$, the average SPL_Δ value is 1.81 dB, with a maximum value of 5.8 dB at the 9th BPF tone.

Instead of:

It is evident from the results that the most significant enrichment is observed at a polar angle of $\theta = 30^\circ$, with an average SPL_Δ value of 6 dB over the first 10 BPF tones, and a maximum value observed close to 15 dB at the 3rd BPF tone. Conversely, for $\theta = 90^\circ$, the average SPL_Δ value is 1.89 dB, with the maximum value reaching 6 dB at the 5th BPF tone.

Also, in the conclusion part, the second to last sentence of the second paragraph should be:

Moreover, this enrichment of the noise level exhibits a stronger directivity pattern in the polar direction, with a maximum of 10 dB enrichment observed at the 4th BPF tone for observer locations close to the vertical axis away from the rotor plane.

Not:

with a maximum of 15 dB enrichment observed at the 3rd BPF tone