

LETTER TO THE EDITOR

Unto K. Laine

In the Introduction to *Aurorae Borealis Studia Classica* Vol. VIII (2020), on pp. 10–11, there is a reference to the results of the Auroral Acoustics Project that started at Helsinki University of Technology in 2000 (Laine 2016). The author writes: “He [Unto K. Laine] also says that the source of the sound is located very close to the ground, at an altitude of about 70 meters, and that you can only hear it at a distance of 80–100 km away” (Runge 2020).

This particular sentence is misleading. I have never claimed anything like that. A fact in acoustics is that sounds created by the aurora borealis at altitudes of 80–100 km are not audible at the ground level. Infra sounds (frequencies <20 Hz) only can reach the ground from that altitude. The said 80–100 km is the typical altitude of the lowest part of the visible aurora.

According to many observations, auroral sounds and visible aurorae are synchronized. However, this does not mean that the auroral light is the cause of the sounds. The synchronization is due to the solar wind fluctuations, which simultaneously modulate the visual and auditory components of the auroral event (Laine 2019).

3 March, 2020

Unto K. Laine

References

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Laine, Unto K.: Auroral Crackling Sounds and Schumann Resonances. 26th International Congress on Sound and Vibration, Montreal, Canada, July 2019. Conference paper shared on [ResearchGate](#) (last accessed 10 March 2020)

Runge, Franziska: Biographical Introduction, Interpretation and Summary of Contents. *Aurorae Borealis Studia Classica* VIII (2020): 1–12. <https://doi.org/10.7557/absc.2020.8>

