

Appendix E : Results obtained with the sound level meter

Results obtained by the sound level meter (SVANTEK 977A, Warsaw, Poland) at each distance for both habitats are displayed Figs. E-1 and E-2. Figs.E-1a and E-2a show the mean power spectrum of each signal transmitted from 10 m to 100 m. Contrary to the SM4 ARU (see Figs. 1b and 2b in the article) no frequency lobes can be seen as the frequency response of the reference sound level meter was flat. The overall sound level (i.e. white noise level + ambient sound level) as well as the ambient sound level alone and the white noise sound level alone (i.e. overall sound level - ambient sound level) measured by the reference sound level meter are shown for each habitat (Figs. E-1b and E-2b). Patterns are similar to those obtained with the ARU (see Figs. 1c and 1c in the article).

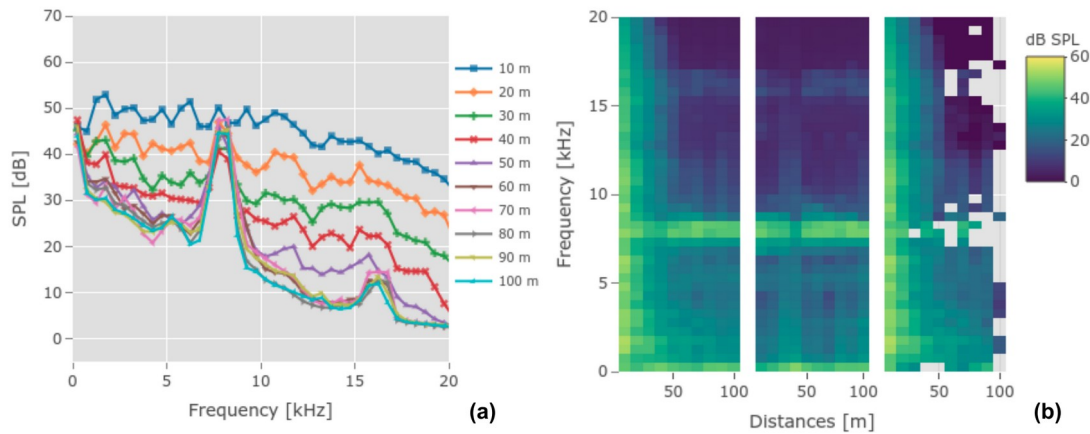


Figure E-1: Ambient sound and white noise variations according to distance in the Neotropical rainforest (French Guiana). (a) Mean spectra of the total sound pressure level (dB SPL) (i.e. ambient sound + white noise) measured at each distance. (b) Map of sound levels: overall transmitted signal at each propagation distance (left), ambient sound only (centre) and white noise only (right). The missing pixels in panel (c) represent the distance-frequency combinations where the amplitude level of white noise could not be disentangled from the ambient sound. The unit is dB SPL (re20 μ Pa). The audio signals were collected by the sound level meter on 18 February 2019 between 2 pm and 5 pm.

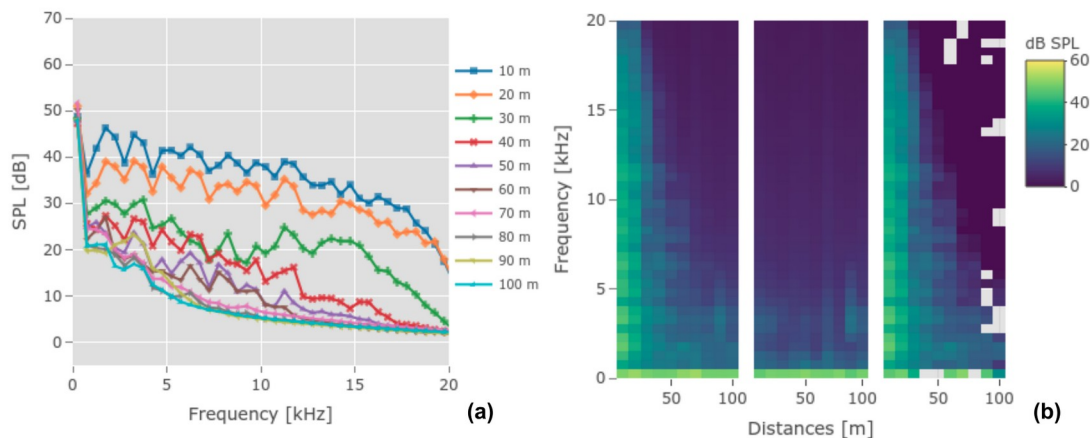


Figure E-2: Ambient sound and white noise variations according to distance in the Alpine coniferous forest (Jura). (a) Mean spectra of the total sound pressure level (dB SPL) (i.e. ambient sound + white noise) measured at each distance. (b) Map of sound levels: overall transmitted signal at each propagation distance (left), ambient sound only (centre) and white noise only (right). The missing pixels in panel (c) represent the distance-frequency combinations where the amplitude level of white noise could not be disentangled from the ambient sound. The unit is dB SPL (re20 μ Pa). The audio signals were collected by the sound level meter on 11 July 2019 between 11 am and 1 pm.