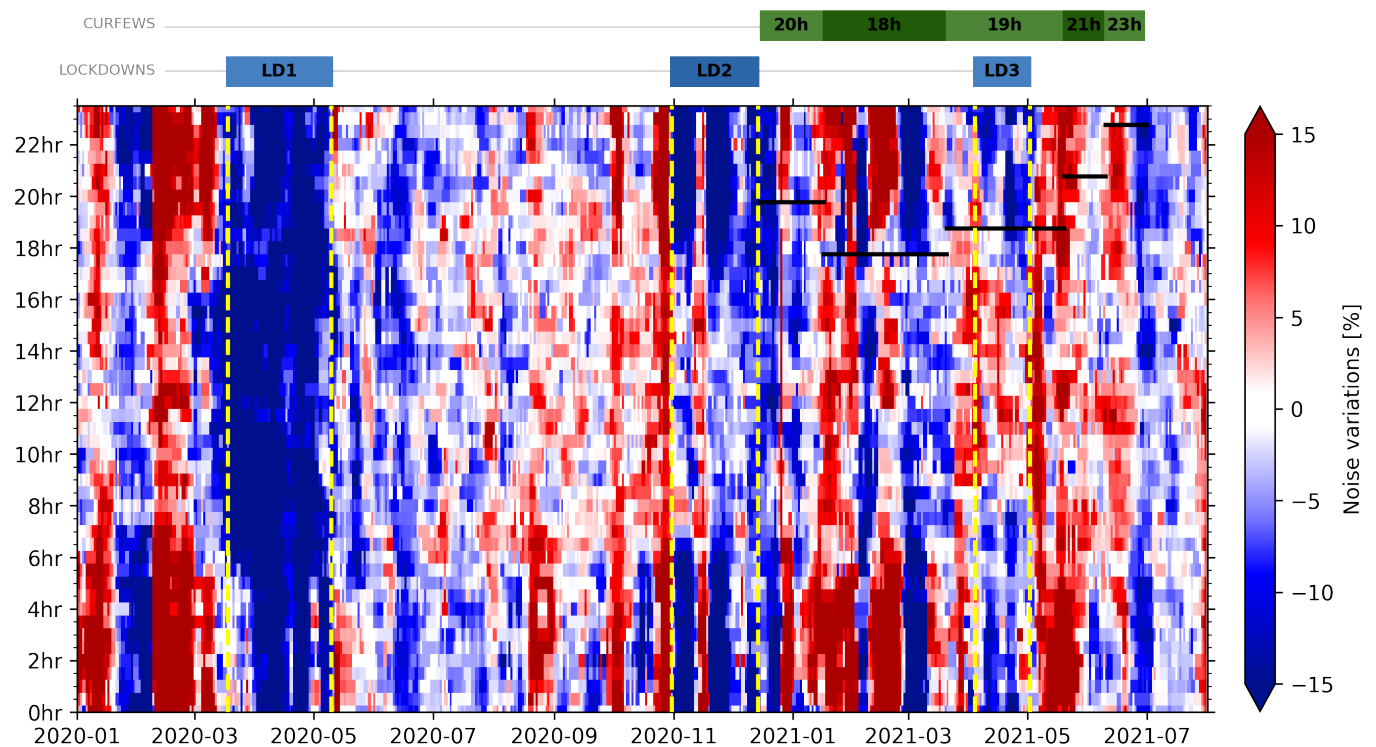


# Supplementary Material for: Societal Impact of COVID-19 Crisis on the Ambient Seismic Noise in Metropolitan France

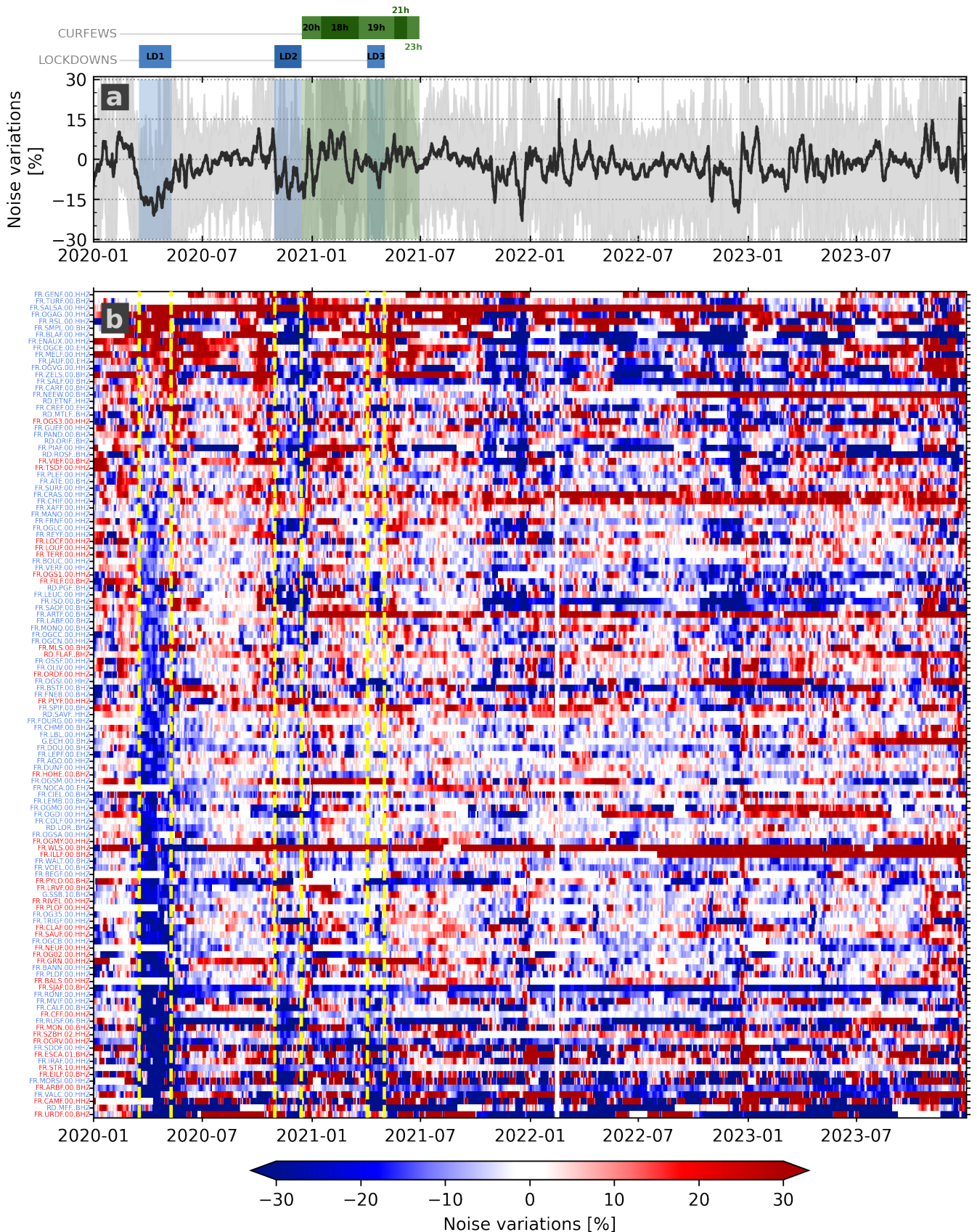
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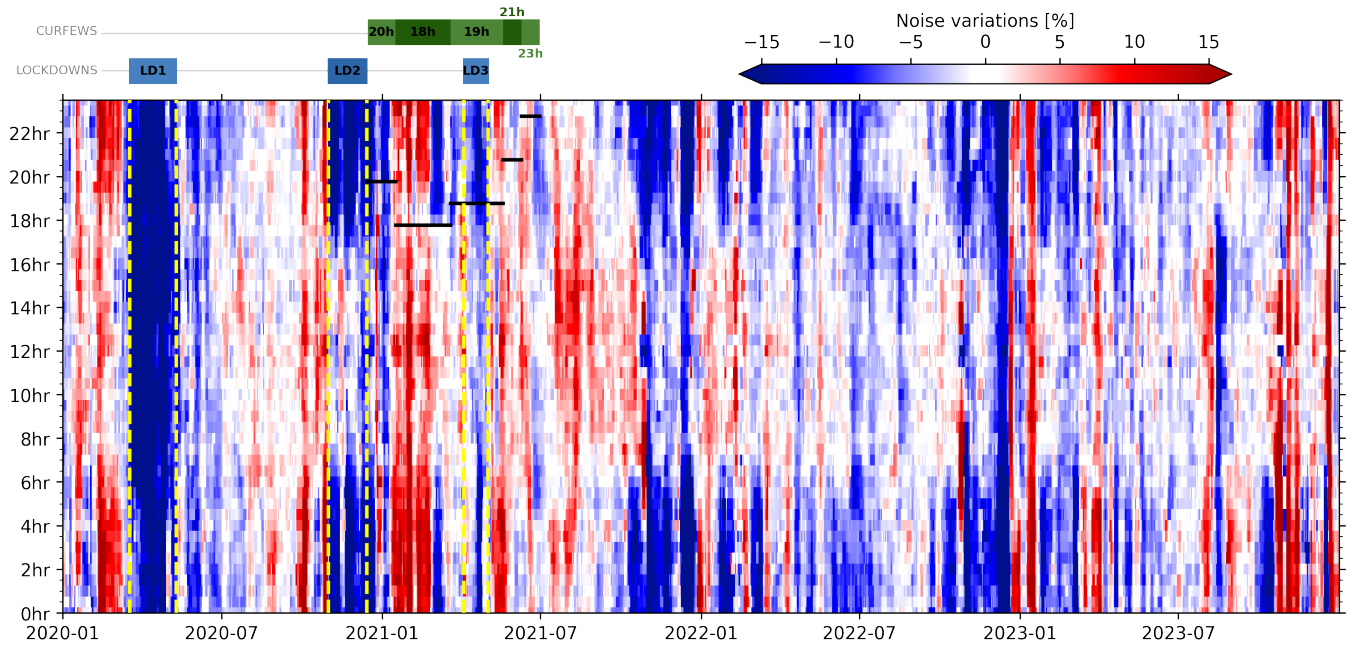


**Figure S1** Median noise level variations at all seismological stations considered in Figure 10d, relative to the median noise level of the same calendar day in 2019, for each half-hour of the day. The reference noise level is specific to each half-hour of the day. Vertical yellow dashed lines indicate the three lockdowns during the COVID-19 period (see Table 1 for details). The top panel indicate the various restriction periods during the pandemic (blue for lockdowns; green for curfews with starttime indicated). Horizontal black lines indicate the beginning of curfew hours.

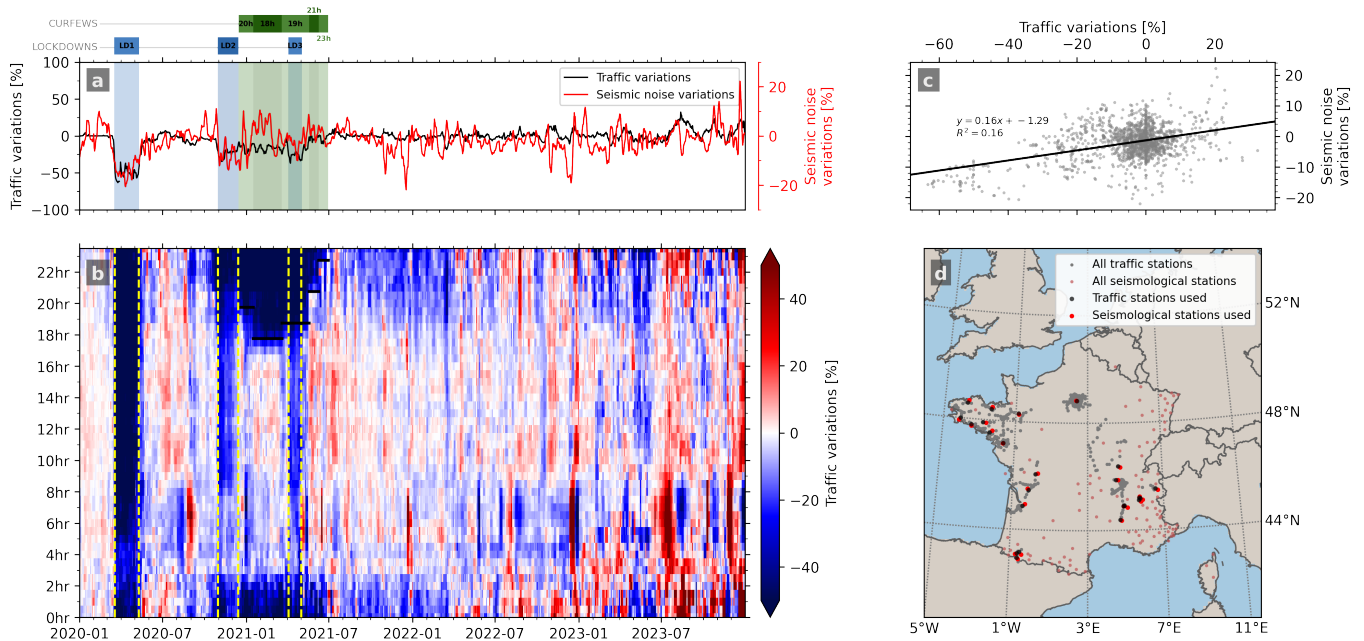
\*Corresponding author: f.mattern@unistra.fr



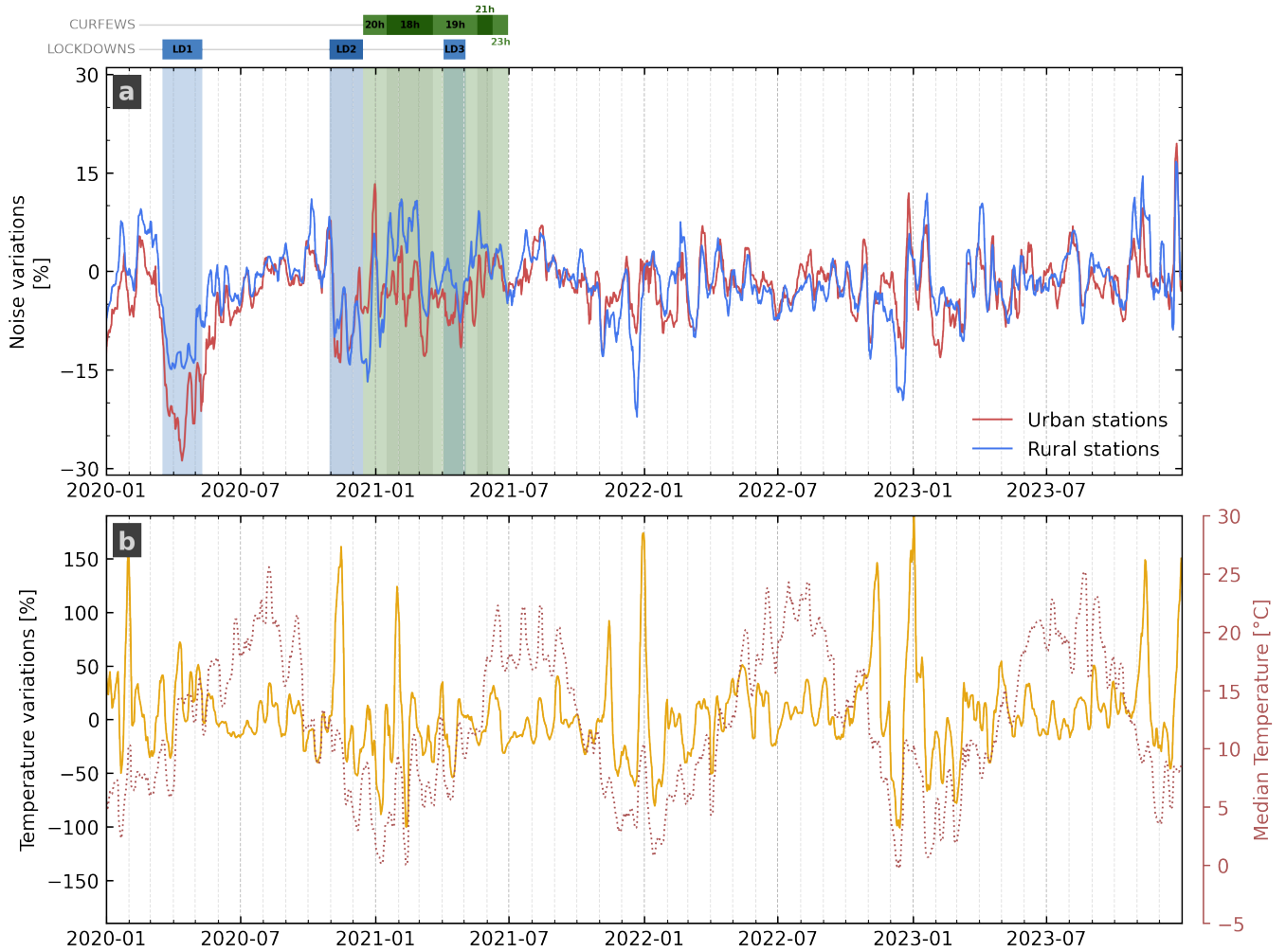
**Figure S2** Extension of Figure 4 to 2022 and 2023. (a) Median noise level variations at all stations used in this study compared to the median noise level of the same calendar day in 2019 (dark grey), smoothed by a moving window of 7 days (black) and the distribution of percentiles 10% and 80% around the median value (grey). The vertical bands indicate the various restriction periods during the pandemic (blue for lockdowns; green for curfews with starttime indicated). (b) Noise level variations for all stations compared to the median noise level of the same calendar day in 2019. The stations are sorted in ascending order from the station having the smallest decrease in noise level during the first lockdown to the one having the strongest decrease. Station name is either red (urban stations) or blue (rural stations). Vertical yellow dashed lines indicate lockdown dates during the COVID-19 period (see Table 1 for details).



**Figure S3** Extension of Figure 6 to 2022 and 2023. Median noise level variations at all stations used in this study, relative to the median noise level of the same calendar day in 2019, for each half-hour of the day. The reference noise level is specific to each half-hour of the day. Vertical yellow dashed lines indicate the three lockdowns during the COVID-19 period (see Table 1 for details). The top panel indicate the various restriction periods during the pandemic (blue for lockdowns; green for curfews with starttime indicated). Horizontal black lines indicate the beginning of curfew hours.



**Figure S4** Extension of Figure 9 to 2022 and 2023. a) Median noise level variations (red) and median traffic variations (black) with a 7 days moving window stack. The vertical bands indicate the various restriction periods during the pandemic (blue for lockdowns; green for curfews with starttime indicated). b) Median traffic variation with respect to the hour of the day. The reference is specific to each half-hour of the day relative to the year 2019. Vertical yellow dashed lines indicate lockdown phases during the COVID-19 period (see Table 1 for details). c) Noise level variations with respect to traffic variations. The thick black line is the best fitting line. d) Public traffic stations and seismological stations used in this comparison.



**Figure S5** a) Median noise level variations for all rural (blue) and urban (red) stations compared to the median noise level of the same calendar day in 2019, smoothed by a moving window of 7 days. The vertical bands indicate the various restriction periods during the pandemic (blue for lockdowns; green for curfews with starttime indicated). b) Median temperature variations (yellow line) and absolute median temperature (red dashed line) in metropolitan France. Temperature data are distributed by the French government portal, produced by Météo France (<https://www.data.gouv.fr/datasets/donnees-climatologiques-de-base-quotidiennes/>), and processed as the ambient seismic noise, relative to the year 2019.