Interactive comment on "The effect of confinement due to COVID-19 on seismic noise in Mexico" by Xyoli Pérez-Campos et al.

Thomas Lecocq (Referee)

thomas.lecocq@seismology.be

Dear authors,

I reviewed your manuscript with interest. Please excuse me for the delay, finding reviewers was really difficult.

The presentation of the results from the Mexican networks is interesting as it sheds light on the importance to take the difference of cultural/setting of cities, with links to the cities' development, organisation of the infrastructure, road system and shopping/work life.

Following this, the analysis on Figure 1 is particularly interesting, and this figure should

be reorganised to make the maps larger, with clearer (bigger) symbols. Panel c) is great, as it suggests that stations installed in locations with less than 10.000 inhabitants show no weekly cycles, i.e. effectively "away" from anthropogenic vibrations. Yes, some stations in that area do show weekly cycles, and a drop. It would be interesting to exemplify those in the results/discussion (maybe number them/label them) and try to explain the reason why they stand out (local roads, schools, industry?).

Figure 3: the graphs should be made clearer (remove the X for scatter points, e.g.) and the colour described. This figure allows "believing" the noise level is anti correlated with traffic light colour, and this analysis should be complemented with example scatter plots of "RMS drop" vs "cases", coloured by the TL colour. An analysis of the time lag between the two series, or the lag between a TL change & the seismic response would be really interesting in supporting the authors' claims on the signature of TL on seismic data.

Figure 4: are there enough events to conduct a completeness magnitude estimation before & during measures were enforced?

Figure 5: please highlight in a) the position/timespan of the events presented in b)

Regarding the "Sentiste un sismo": could the author provide some details on what kind of reports were made by citizens? does it include small/weak motions, mentions of sound, etc?

I agree with the other reviewer that your article should include a discussion of the changes in Mexico in the perspective of some other results published since last summer, including cases in cities, rural areas and increased detectability.

I hope you will address those comments to make this "network"-wide contribution even more interesting for other network operators & countries.