- L.23 Earth merits to be capitalised as the other celestial bodies.
- L.30-31 “To be able to monitor the seismic sources, seismic networks require knowledge about the noise content of the networks”, This sentence is not necessarely true. One could detect events by observing P-picks without knowing anything about the noise level and their sources. This counts when one is interested in more sophisticated analysis ad, for example, determining the detection threshold.
- L61-66, This part could be shortened with a clear statement that mention that the lockdown period can be used to determine the anthropogenic component of the background noise.
- L.73-75, It remains unclear to me why data from 2022 are not included in this study. The authors in an early answer wrote that they were evaluating it. The authors claim they provide a better coverage.
- L.100 studied by grouping”, better “grouped”?
- L.108, “20 randomly selected”, I do not understand the motivation for a random selection, and the authors forget to explain it. If the intention was to present the variety of noise levels, how can the reader interpret the differences without knowing the different location, soil etc? At least the 20 should be marked on map. I would suggest to make an arbitrary selection in which different soils and different type of urbanisation are represented. I do not understand why the authors only represent six narrow beans and not the full PSD. The authors do not explain why the “periods of interest” are the 6 reported at line 109. This is somehow in contrast this sentence at lime 112 “we are mainly interested in periods less than 5s”. Formally speaking, the latter selected bean (5s) is out of this range of interest. The above sentence also contrast with the definition given in line 55 in which 5s is included.
- L124+ Noise decreases over night, ok. But from figure 6, I see large patches of white markers as in Tuscany in which there is not such a decrease. This is not mentioned neither discussed. As mentioned above this would be the key aspects that make this paper valuable for publication.
- L127-129 we have 5 periods, 5 median values and 6 number of noiser stations. Can’t be.
- L.163, “italian strong motion network” is something different from RAN or Integrated RAN? This was never defined although it is mentioned in the title, here and in the caption of figure S1.
- L.178 and following, The discussion in this paragraph is not exhaustive. In frame d) we have large patterns indicating “no variation” while in frame f) the Pianura Padana is dominated by blue. This cannot be neglected. These are, in my opinion the key aspects that would make this manuscript valuable.
- L.181-184, this is a clear sample of my general comment. We are in the section “Discussion” dedicated to the discussion of the results and the section mention previous results and give motivation for the results of this

paper. But this is not enough, how can I be certain that we are observing wind or sea or whatever else if the authors do not show it. One could compare noise variation with wind speed, or with sea storms, or traffic data. This is in my opinion an incorrect approach to data analysis.

- L.193, I am confused, Noiser or quiter? Where can I see this?
- L.226-232, What is the added value of this study with respect to what observed by Poli et al, or by Piccinini et al? The latter also discusses spatial patters and economical motivations. It is not enough to write that noise generated by human circulation decreased when people where locked down. This is not a novel discovery.....
- L.233-236, This are "results" not discussion of them.
- L255 and 244, for those not familiar with the area, DTS2 appears located in two different places.
- All toponyms should be marked on maps, authors cannot presume that the reader knows where Ischia, or Naples or Palata are located on maps.
- Section 5.3, This section presents some results, and it does not include a discussion of them in the contest of the paper.
- As remarked in my previous review, accuracy is crucial when writing and when reporting information. The coordinates of Palata differ in section 5.3 and in figure 15. Moreover 41.886, when truncated to a two digit number is 41.89.
- L274 "have higher noise levels than the AHNM" should be "have noise levels higher than AHNM"?
- L278, the example of CSA7 is confusing, the station was never mentioned before (except in one figure of the supplementary material). I think that CSA7 should be explicitly inserted in the discussion or results section before citing it in the conclusion. How can the reader understand this example?
- L278 "some of these stations" some is vague. I think the author could evaluated the number of percent of station located in towns.
- L279 "the true nature of the ground motion if there is a strong earthquake nearby" this is a generic and vague statement. Data and analysis could be used to provide a quantitative result. How many can record the full waveform of a magnitude 3 or 4 or 2.5 with a proper Signal-to-Noise ratio?
- L280 "capabilities of the stations" is a vague concept.
- L281, again, "The surrounding conditions for RAN stations within settlements are variable and have noticeable effects on the noise levels" is this a result of this study? How the authors distinguished the different condition for stations within settlements? How can we get to this conclusion?
- L289, Why this is observed at some stations and not at others? Instrumental difference, site difference?
- L295 The author touch the fact the accelerometers are "deaf" and, in absence of strong ground motion they record the self noise of the instrument. Should not this pointed out at the beginning to restrict the detection capability of the instrumentation used instead of using it as an

empirical conclusion?

- L298-299 “an average reduction in the noise level of 1.0 dB (and up to 2.9 dB at 0.0625 s) during the daytime”. Neither in the manuscript nor in the supplementary material this numbers (1.0, 2.9 and 0.0625) can be found by myself
- Figure 1, D’Alessandro et al is 2020 in the figure and 2021 in the caption.
- Figure 4. Again on the care of details, The figure as nine frames labelled from a) to I). In the caption it is mentioned a-g). Moreover the latter is for 80.6s but this period is never discussed in the manuscript. “Vertical components are presented in the following figures and Electronic Supplement.” This is not clear.
- Figure 5, the noise model are NLNM and NHNM by Peterson or A… by Cauzzi and Clinton, the caption is confusing.
- Figure 6, The caption is not correct. I suspect the figure represents the different for each station and for each period between the median of the noise level at daytime and nighttime.
- Figure 14, I fear that the authors while using the image from Google did not follow the reproduction rules set by NHESS and by google. please check.
- Table 3, caption. Stations or number of stations? “with higher” or “with noise level higher”
- Table S1, To me “evolution of the sensors” means how each sensor evolved/changed”. Looking at numbers, I suppose the authors are referring to the change over time of the number of sensors divided by type.
- Figure S1, The authors did not describe what is the difference between the single maps or, in other words, what the number on top of each frame is. Moreover, it is a common practice to label each frame with a letter or a number.
- Figure S2, il the title, “Difference” should not be capitalized. In the title the author us the dash without spaces (Weekday-Weekend) while in the caption the use it with spaces (2019 - 2022). Should this follow the same rule?
- Figure S2 caption, punctuation is messy
- Figure S3, I suggest to include also M5 and M6 in this figure. And to carefully discuss it. How many station would miss to record correctly the full waveform for the ground shaking of a M5 or M4? Moreover, different lines should be described in the caption.
- Table S3, caption. The authors miss to mention what is higher than AHNM, I suppose they are referring to “Stations with noise level higher then AHNM”.
- Table S3. Period and AHNM require the measure unit besides them. No of station should be no of stations.