Review of: "Evaluation of Ambient Air Quality Level at Various Locations within Lead City University, Ibadan"

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Potential competing interests: No potential competing interests to declare.

The paper presents an important effort to monitor pollutants at a university in Ibadan, Nigeria. It is essential to have data on air pollutants in developing countries since several of them present air quality issues, so collaboration among the researchers in these countries is essential; thus, in the end, some links to articles concerning pollutants in Brazil are shared, which may help in the discussions. The authors' sizable data needs extra statistical treatments and better discussions. The other sections are well-written. Look at the points and ideas below:

1. The numbers could be inserted into the map.
2. The map could include possible sources (busy streets, factories, biomass burning, etc).
3. Discuss the proximity of the roads and observed concentrations.
4. Pearson correlations can be performed between meteorological data and pollutant concentrations to see the effect of temperatures and humidity on the accumulation of pollutants.
5. Pearson correlations can be performed between gaseous and particulate pollutants to verify if they come from the same source.
6. Compare average indoor and outdoor concentrations.
7. Insert daily and hourly representative plots of the variation of pollutants - See the effect of the season or time of the day on pollutant concentrations.
8. Count and discuss daily surpasses of WHO guidelines.
9. Check the backward air mass trajectories of most polluted days or periods to see if there is long-range transport (READY - (noaa.gov))

Here are some papers from studies developed in Brazil that may help in the discussions:

https://doi.org/10.1007/s11869-010-0124-1

https://doi.org/10.1590/S0102-77862009000100010

https://doi.org/10.1007/s00703-005-0139-6

https://doi.org/10.1155/2016/8570581