

The manuscript aims to show that the performances of air modelling systems during holidays are low due to an overestimation of emissions' levels. The study is carried out at European scale with an well-known air quality model (SILAM) and uses the setup of Copernicus Atmospheric Monitoring Service (CAMS) regional air quality forecasts.

The authors propose two ways to reduce emission levels respect to the base case (BL) "with the holiday days considered as Sundays (the HS case)" and "with holidays getting 80% of emission reduction for the sectors affected by the DOW profile (the R3 case)". The impact of these three simulations is shown only for temporal correlation coefficient of hourly NO₂, CO, O₃, and PM_{2.5} concentrations (Figs.8-10) and for NO₂ concentration during Christmas period at one station: NL00107 (Fig.7). Figs. 2-6 show daily statistics for NO₂ concentration only for BL and HS simulations during Christmas, New Year, Easter, May and Ramadan holidays.

The purpose of this study to investigate at EU scale, in a systematic way, the effect of the holidays' emissions on air quality models' predictions is interesting, yet the manuscript does not show in comprehensive and concise manner that. The reader would like to see the impact of emissions on NO₂, CO, O₃, and PM_{2.5} concentrations, at stations and over whole Europe, in the manuscript, not in the supplementary material where specific results at stations can be shown. The study also does not show and discuss the relation between concentrations and emissions' reductions (HS and R3 scenarios) as a whole and by country as a marker for "regional specifics". Moreover, an evaluation of HS and R3 assumptions at stations, by country and station type can give indications about the value of the hypotheses used globally.

In addition to a more careful analysis of the results, their presentation and discussion should be improved, both for language and rationale. Also not all claims are justified. For example "line 185 The impact of holidays on the SILAM spatial skills was the largest for the Christmas week (Figure 2a)". This comment should be supported by Fig.2 where all the holidays should be shown. As it is, this statement seems to be valid for all pollutants.

Moreover, an analysis and discussion of results as a function of pollutant type, supported by data and images should be included in the study. For example, intuitively, it is expected that the impact of reductions O₃ during spring will be different from winter.

The research topic under investigation in this study is of interest for air quality modelling community but the manuscript has too many pitfalls in all parts, except Introduction, therefore I would not recommend the manuscript for publication in the current form.