



## Corrigendum to “Evaluating urban methane emissions and their attributes in a megacity, Osaka, Japan, via mobile and eddy covariance measurements” published in Atmos. Chem. Phys., 25, 12513–12534, 2025

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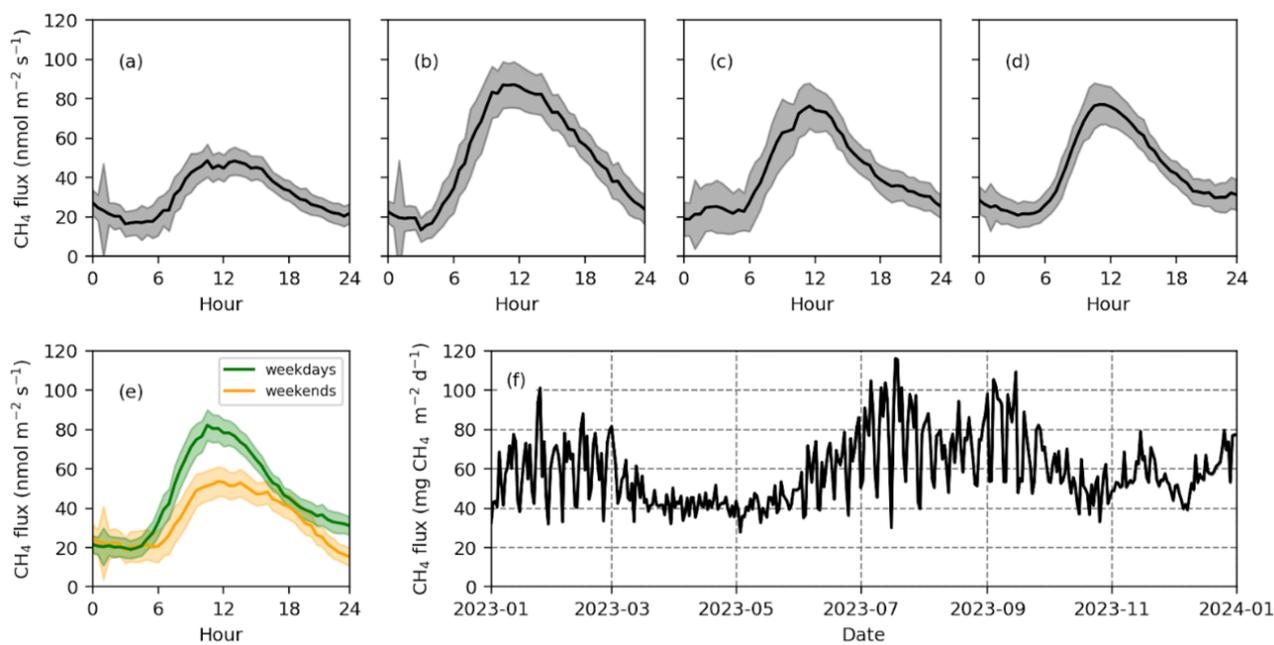
In the submitted manuscript, during the aggregation of half-hourly CH<sub>4</sub> fluxes to daily values, bootstrap-derived mean and standard deviation values were incorrectly averaged. This incorrect treatment of bootstrap statistics resulted in a systematic underestimation of daily CH<sub>4</sub> fluxes and the resulting annual emissions.

The daily and annual CH<sub>4</sub> fluxes have been recalculated using an appropriate temporal integration of half-hourly fluxes. As a consequence, Fig. 8f in the original paper has been updated and is presented here as Fig. 1. The correct annual CH<sub>4</sub> emission is 21.5 g CH<sub>4</sub> m<sup>-2</sup> yr<sup>-1</sup>, which is approximately 1.5 times higher than the originally reported value. This correction does not affect the seasonal characteristics of CH<sub>4</sub> emissions or the main conclusions of the study.

In addition, the CH<sub>4</sub> emission estimate reported by the Osaka municipal government has been corrected to 1989 t CH<sub>4</sub> for the year 2021 according to subsequent communication with the relevant authority.

### References

Ueyama, M., Umezawa, T., Tera, Y., Lunt, M., and France, L.: Evaluating urban methane emissions and their attributes in a megacity, Osaka, Japan, via mobile and eddy covariance measurements, Atmos. Chem. Phys., 25, 12513–12534, <https://doi.org/10.5194/acp-25-12513-2025.119210>, 2022.



**Figure 1.** CH<sub>4</sub> fluxes measured via the eddy covariance method in 2023. Mean diurnal variation in CH<sub>4</sub> fluxes from March to May (a), from June to August (b), from September to November (c), from December to February (d), and for the whole year for weekdays and weekends (e). The shading in (a)–(e) indicates the standard error of the measured CH<sub>4</sub> fluxes at each time point. The daily CH<sub>4</sub> flux for 2023, where the shading represents the standard error based on 100 bootstrap samples in gap filling (f). This figure is a corrected version of Fig. 8 in the original publication.