



Supplement of

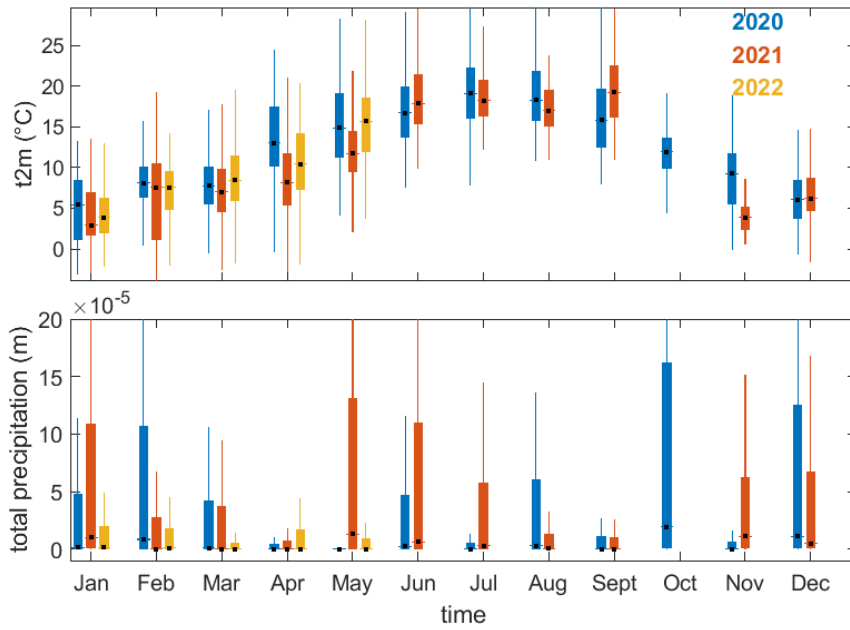
Measurement report: Ammonia in Paris derived from ground-based open-path and satellite observations

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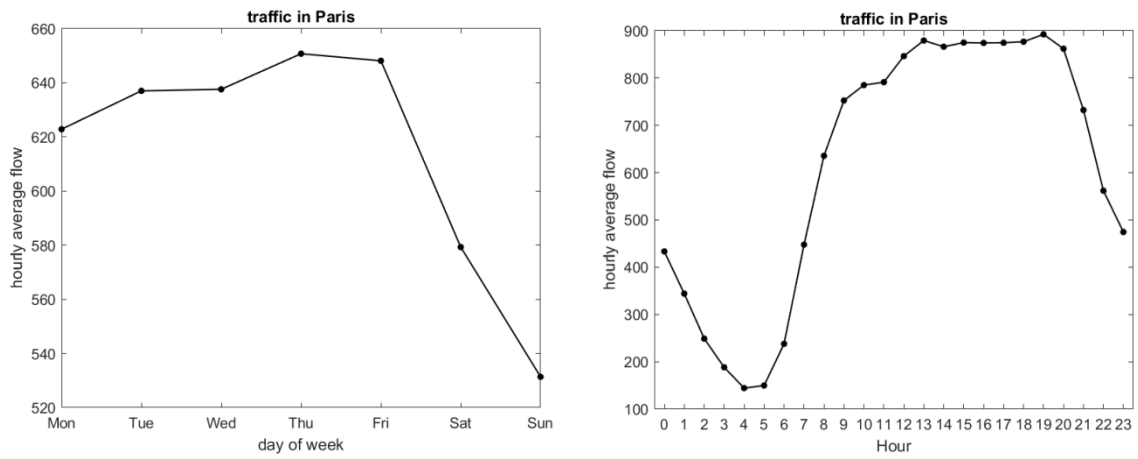
1 **S1: influence of meteorological condition on seasonal and monthly NH₃ variabilities**



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3 *Figure S1: Box plot of monthly temperature at 2 meters (t2m, in °C, top panel) and total precipitation*
4 *(in m, bottom panel) color coded by the year of measurements (2020 in blue, 2021 in orange, and 2022*
5 *in yellow) derived from ERA-5 around Paris.*

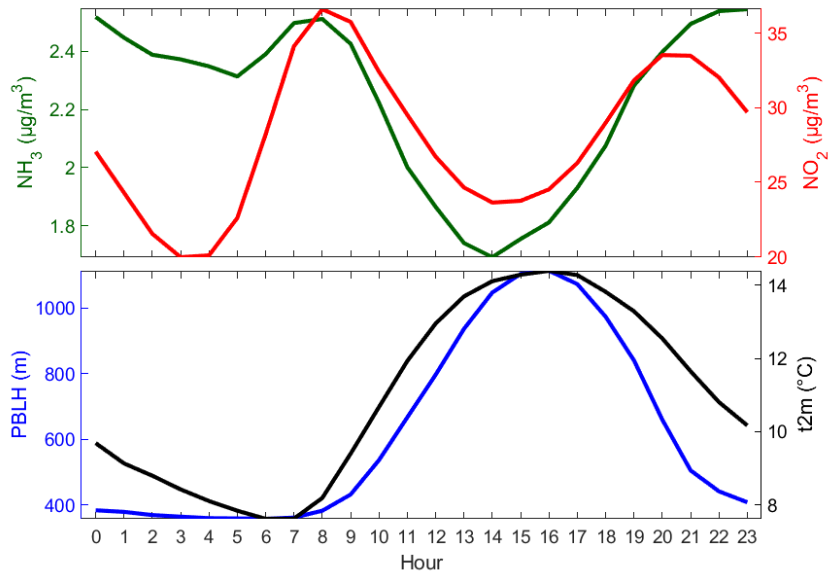
6 **S2: road traffic in Paris**



7

8 *Figure S2: weekly (left panel) and diurnal (right panel) cycles of hourly mean flow of vehicles observed*
9 *in Paris in 2020 and 2021. Source : [https://opendata.paris.fr/explore/dataset/comptages-routiers-](https://opendata.paris.fr/explore/dataset/comptages-routiers-permanents/information/?disjunctive.libelle&disjunctive.etat_trafic&disjunctive.libelle_nd_amont&disjunctive.libelle_nd_aval)*
10 *permanents/information/?disjunctive.libelle&disjunctive.etat_trafic&disjunctive.libelle_nd_amont&di*
11 *sjunctive.libelle_nd_aval*

12 **S3: PBLH (Planetary Boundary Layer Height) on surface measurements**



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14 *Figure S3: mean diurnal cycle of atmospheric NH_3 and NO_2 ($\mu\text{g}\cdot\text{m}^{-3}$, green and red lines in upper panel)*
15 *and PBLH (m, in blue, lower panel) and atmospheric temperature ($^{\circ}\text{C}$, in black, lower panel) measured*
16 *in Paris between January 2020 and June 2022.*

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