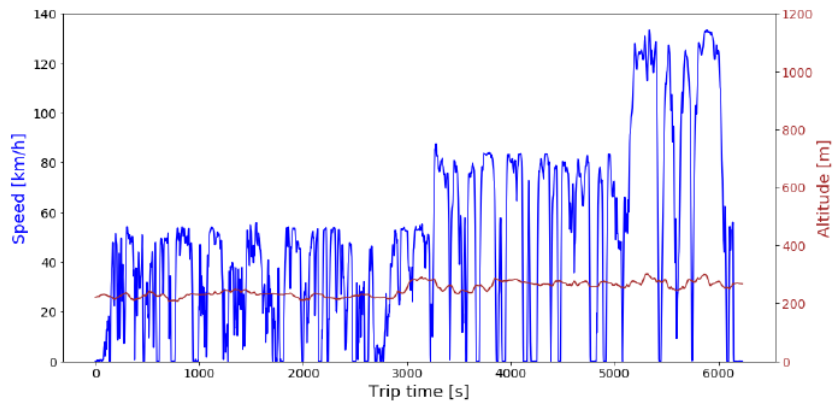


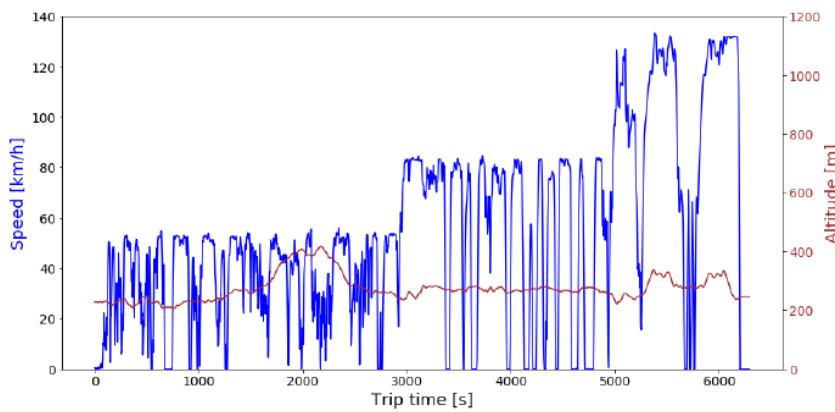
## Supplementary Materials

Figure S1. Altitude and speed profile of (a) route-1, (b) route-2 and (c) route-3.

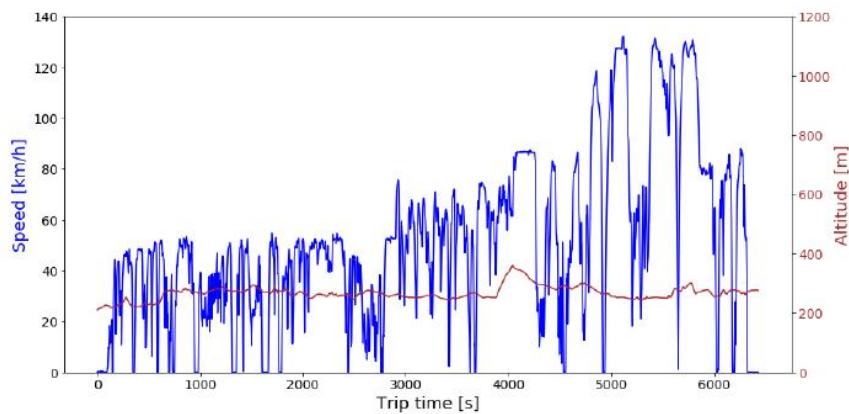
(a)



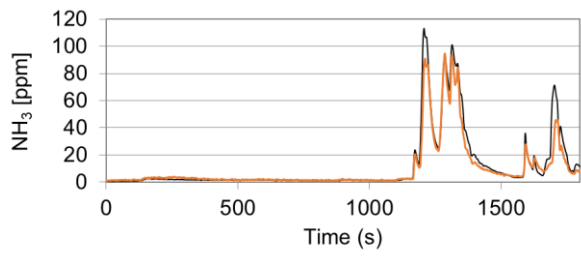
(b)



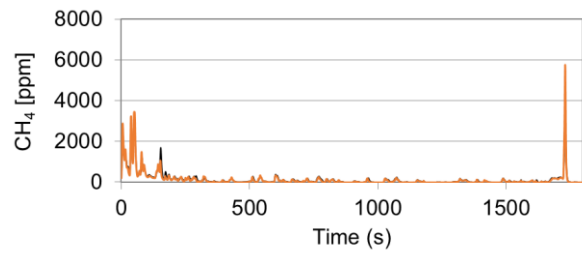
(c)



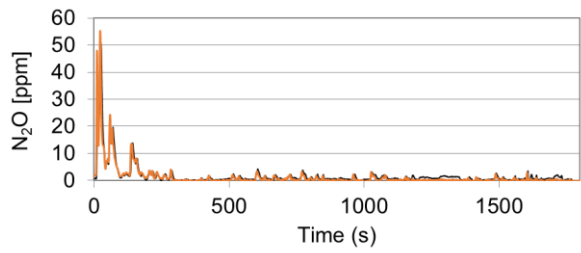
**Figure S2.** (a)  $\text{NH}_3$ , (b)  $\text{CH}_4$  and (c)  $\text{N}_2\text{O}$  emission profiles registered with the portable FTIR (orange) and lab-grade FTIR (black) during a WLTP test performed with DV1.



(a)

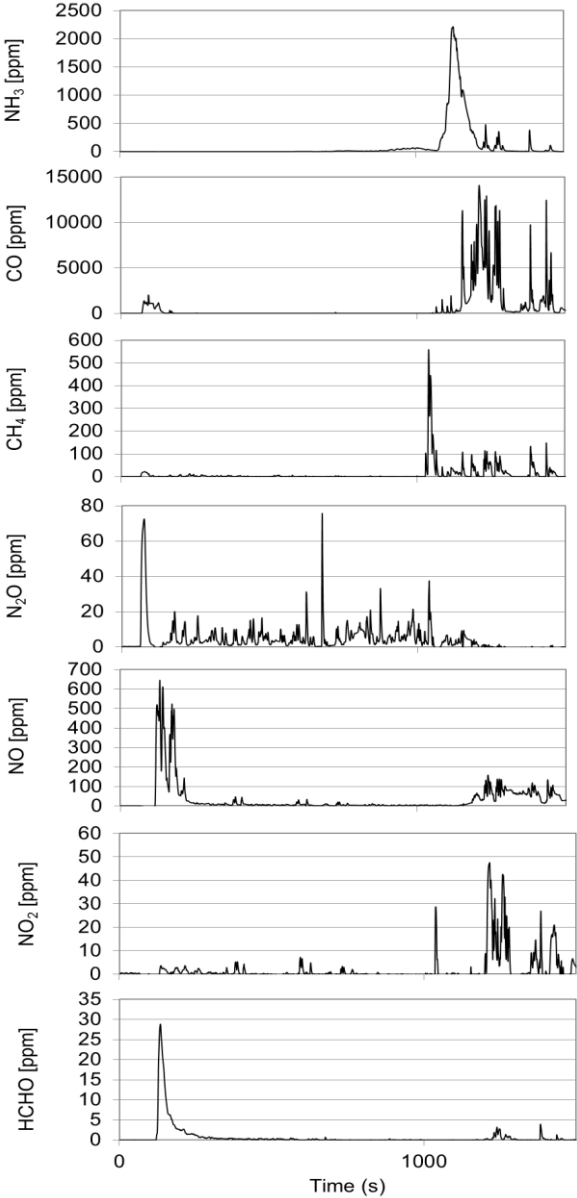


(b)



(c)

**Figure S3.** NH<sub>3</sub>, N<sub>2</sub>O, NO, NO<sub>2</sub>, CO, CH<sub>4</sub>, and HCHO on-road emissions profiles registered during a DPF regeneration event of the DV1.



**Figure S4.** (a) CO emission profile from the CNG-LCV measured using NDIR present in the PEMS (black line) and the portable FTIR (red line). (b) CO emission profile (red line) and N<sub>2</sub>O emission profile (blue line) measured using the portable FTIR.

