

| Instrument | Online measures | | | Offline measures | |
|--|---|--|--|---|---|
| | GC-FID ChromaTrap | GC-FID AirmoVOC | PTR-QMS scan mode (33–137 amu) | DNPH cartridges – chemical desorption (acetonitrile) – HPLC-UV | Solid adsorbent – adsorption/thermal desorption – GC-FID |
| Time resolution (min) | 30 | 30 | 10 | 180 | 180 |
| Number of samples | 1282 | 1321 | 3879 | 207 | 211 |
| Temporal coverage (%) | 94 | 97 | 93 | 88 | 90 |
| Detection limit (ppt) | 8–104 | 7–17 | 11–203 | 6–27 | < 5 |
| Uncertainties $\frac{U(X)}{X}$ (%) mean (min–max) (%) | 39 (14–73) | 36 (18–53) | 22 (18–44) | (11–37) | (3–26) |
| Calibrated species | 9 C ₂ –C ₅ ^a VOCs | 9 C ₆ –C ₁₀ ^b VOCs | 11 mass ^c | 10 C ₁ –C ₆ OVOCs | 6 C ₆ –C ₁₁ n-aldehydes 15 C ₅ –C ₁₆ alkanes 9 C ₆ –C ₉ aromatics 9 monoterpenes |
| Reference | Gros et al. (2011) | Xiang et al. (2012) | Blake et al. (2009), de Gouw and Warneke (2007), Taipale et al. (2008) | Detournay (2011), Detournay et al. (2013) | Detournay (2011), Detournay et al. (2011), Ait-Helal et al. (2014) |