

Type of measurement	Sensitivity in the boundary layer	Vertical profile information	Diurnal variation	Seasonal variation	Total column	Earth coverage
MAX-DOAS	xxx	xx <sup>3</sup>	xxx	xxx	xx	xx
FTIR	x	–	xxx	xx	xxx	x
Direct sun	xxx	–	xxx	xxx	xxx	x
In situ <sup>1</sup>	xx	–	xxx	xxx	–	xx
Aircraft <sup>2</sup>	xx	xxx	x	–	xx <sup>4</sup>	x
Satellite instruments	x	–	x	xxx	xx	xxx <sup>5</sup>

<sup>1</sup>Surface measurements that could be combined with regional modelling. <sup>2</sup>Including ultra-light and unmanned airborne vehicles.

<sup>3</sup>Up to 2–3 km. <sup>4</sup>Profiles generally need to be extrapolated. <sup>5</sup>Different daily coverage and spatial resolutions.