

Species or parameter	Method	Uncertainty	Time resolution
ClNO ₂ , PAN, PPN	Chemical ionization mass spectrometry (Mielke et al., 2011)	±25 % ±10 %	30 s
N ₂ O ₅	Red diode laser cavity ring-down spectroscopy (Odame-Ankrah and Osthoff, 2011)	±25 %	1 s
O ₃	UV absorption (Thermo 49i)	±10 %	10 s
NO/NO _y	O ₃ -Chemiluminescence (Thermo 42i-Y) with heated Mo converter; operated with inlet filter	±30 %	10 s
NO ₂	Blue diode laser cavity ring-down spectroscopy (Paul and Osthoff, 2010)	±10 %	1 s
PAN, PPN	Gas chromatography with electron capture detection (Tokarek et al., 2014)	±10 %	6 min
Photolysis frequencies	Spectral radiometry (Metcon)	±20 %	10 s
Aerosol size distribution	Scanning mobility particle sizer (SMPS)	not available	15 min
Aerosol composition	Aerosol Chemical Speciation Monitor (ACSM)	±20 %	30 min
VOCs	Agilent	±30 %	20 min (1 h ^a)
Meteorological data	Various		