

Chemical species	Accuracy (2σ confidence)	Time resolution	Reference that describes the instrument
OH, HO ₂	$\pm 32\%$	20 s	Faloona et al. (2004)
NO; NO ₂ ; O ₃	0.01 ppbv + 4 %; 0.02 ppbv + 6 %; 0.04 ppbv + 3 %	1 s	Ryerson et al. (2000); Pollack et al. (2011)
HCHO	$\pm 10\%$ + ± 10 pptv offset	1 s	Cazorla et al. (2015).
NO ₂ ; total peroxy nitrates (PNs); total alkyl nitrates (ANs)	$\pm 5\%$; $\pm 10\%$; $\pm 15\%$;	15 s	Thornton et al. (2000); Day et al. (2002)
CO, CH ₄ , N ₂ O	$\pm 2\%$ or 2 ppbv	1 s	Sachse et al. (1991)
SO ₂ ; HCl; peroxyacetyl nitrate (PAN), peroxypropionyl nitrate (PPN), HNO ₄	$\pm 15\%$ $\pm 20\%$ $\pm 30\%$	10 s	Huey (2007)
H ₂ O ₂ , CH ₃ OOH, ISOPOOH, glycolaldehyde, isoprene epoxydiol (IEPOX), C ₅ H ₁₀ O ₃ , C ₅ H ₈ O ₃ , ethanal nitrate, hydroxyacetone, hydrogen cyanide, HNO ₃ , isoprene nitrate, peroxyacetic acid, propanone nitrate	$\pm(40-80)\%$ $\pm 50\%$ + (25-100) pptv offset	10 s	Crouse et al. (2006)
Isoprene, monoterpenes, methyl vinyl ketone/methacrolein (MVK/MACR), acetone/propanal, methanol, acetaldehyde, acetonitrile	$\pm 10\%$	2 s	Mielke et al. (2008)
Ethyne, ethane, ethane, propene, propane, i-butane, n-butane, i-pentane, n-pentane, n-hexane, n-heptane, 2,3-dimethylbutane, 2-methylhexane, 3-methylhexane, cyclohexane, benzene, toluene, m- and p-xylene, o-xylene, ethylbenzene, cis-2-butene, trans-2-butene, C8 aromatics/benzaldehyde, dimethyl sulfide (DMS), methyl nitrate, isoprene, α -pinene, β -pinene, several halogen-containing compounds	$\pm 10\%$	Variable, seconds to minutes	Colman et al. (2001)
H ₂ O	$\pm 5\%$ or 1 ppmv	1 s	Vay et al. (1998)