

Parameter	Data source	Trace gases		
		NO <sub>2</sub> & O <sub>4</sub>	SO <sub>2</sub>	HCHO
Wavelength range		338–370 nm	305–317.5 nm	336.5–359 nm
O <sub>4</sub>	Thalman and Volkamer (2013), 293 K	✓	×	✓
NO <sub>2</sub>	Vandaele et al. (1998), 220 K, 298 K, I <sub>0</sub> correction (10 <sup>17</sup> molec cm <sup>-2</sup> )	✓	✓(only 298 K)	✓(only 298 K)
SO <sub>2</sub>	Vandaele et al. (2009), 298 K	×	✓	×
HCHO	Meller and Moortgat (2000), 297 K	✓	✓	✓
O <sub>3</sub>	Serdyuchenko et al. (2014), 223 K, 243 K, I <sub>0</sub> correction (10 <sup>20</sup> molec cm <sup>-2</sup> )	✓	✓	✓
BrO	Fleischmann et al. (2004), 223 K	✓	✓	✓
Ring	Ring spectra calculated with QDOAS according to Chance and Spurr (1997)	✓	✓	✓
Polynomial degree		5	5	5
Wavelength calibration	Based on a high-resolution solar reference spectrum (SAO 2010 solar spectra)			