

Input parameter error	Symbol	Parameter uncertainty	Source	Estimated uncertainty on HCHO VCD
Surface albedo	σ_{A_s}	0.02	Kleipool et al. (2008)	10–20 %
Cloud fraction	$\sigma_{f,c}$	0.05	Veefkind et al. (2016)	5–15 %
Cloud height	$\sigma_{p,cloud}$	50 hPa		10–20 %
Profile shape height	σ_s	75 hPa	Upper limit of TM5-MP profile height standard deviation.	20–60 %
AMF wavelength dependency	Model/structural uncertainty	20 %	Lorente et al. (2017)	15–35 %
LUT interp. errors				
Model atmosphere				
Cloud model/cloud correction/ no explicit aerosol correction				