

Filtering criterion	UV-VIS RAL algorithm v2.14	TIR FORLI algorithm v20151001
Averaging kernel matrix	–	– DFS > 1 – All elements < 2 – First derivative < 0.5 – Second derivative < 1
Chi-square test	1	1
Convergence	1	1
Cost function (normalized)	< 120 (< 2)	–
Effective cloud fraction	< 0.20	< 0.13
Negative ozone values	Rejected	Rejected
Product-specific	– GOME-2A/B: January-to-May band 1 SCD < 500 DU – GOME-2B from June 2015 OMI: outer two pixels from each swath rejected	– Ozone rejected if incomplete H ₂ O retrieval – IASI-B: 8 March to 24 April 2013 rejected (erroneous setting) and from April 2015
Solar zenith angle	< 80°	< 83° (daytime) or > 91° (nighttime)
Surface pressure	Rejected if unrealistic	Rejected if unrealistic
Surface temperature	–	Rejected if unrealistic
Tropospheric ozone	–	Ratio of 6 km integrated column to total integrated column > 0.085