

Operational GOME-2 algorithm/product changes in GDP/UPAS

	GDP 4.2 UPAS 1.2.4 Prod. Rev. 01 26.05.2008	GDP 4.3 UPAS 1.3.0 Prod. Rev. 01 25.02.2009	GDP 4.4 UPAS 1.3.2 Prod. Rev. 02 15.03.2010	GDP 4.5 UPAS 1.3.5 Prod. Rev. 03 28.06.2011	GDP 4.6 UPAS 1.3.6 Prod. Rev. 03 08.10.2012	GDP 4.7 UPAS 1.3.8 Prod. Rev. 03 15.07.2013
Total O ₃ col.	Update to LIDORT 3.3 (AMF calculations)		-Empirical correction for scan angle dependency -New TOMS v8 ozone profile climatology -Improved sun-glint correction -Improved ghost column calc. for snow/ice cond.		Important bug-fix in VIC correction	New GOME-2/MetOp-B product -Use of BMD ozone cross-sections -Updated emp. correction factors for scan angle dependency
Total NO ₂ col.	Update to LIDORT 3.3 (AMF calculations)					New GOME-2/MetOp-B product
Trop. NO ₂ col.	New product				Add AKs and improved error estimates	New GOME-2/MetOp-B product
SO ₂ col.	<i>Not available</i>	New product				New GOME-2/MetOp-B product -Improved DOAS fit using Taylor coeff. for O ₃ (G2A and G2B) -Updated reconvolved SCIA SO ₂ cross-sections (G2B) -Improved off-set correction in DOAS fit (G2B) -Improved SO ₂ background correction (G2A and G2B)
Total BrO col.		(18.06.2009) First operational algorithm (336-351.5 nm)		New fitting window (332-359 nm)		New GOME-2/MetOp-B product Equatorial background correction
HCHO col.	<i>Not available</i>	<i>Not available</i>	New product			New GOME-2/MetOp-B product
Total H ₂ O col.	<i>Not available</i>	<i>Not available</i>	New product	Improved quality flag and error calculation		New GOME-2/MetOp-B product Empirical correction for scan angle dependency
OCRA/ROCINN cloud param.					Shift PMD measurements (because of detector readout time differences)	New GOME-2/MetOp-B product