Supplement of Atmos. Chem. Phys., 22, 6843–6859, 2022 https://doi.org/10.5194/acp-22-6843-2022-supplement © Author(s) 2022. CC BY 4.0 License.





Supplement of

Global total ozone recovery trends attributed to ozone-depleting substance (ODS) changes derived from five merged ozone datasets

Mark Weber et al.

Correspondence to: Mark Weber (weber@uni-bremen.de)

The copyright of individual parts of the supplement might differ from the article licence.

Table S1. Different MLR settings applied to the broad zonal mean median ozone timeseries but limited to the period 1979-2016 (last four years removed compared to Table 3). For explanations of terms see Table 3. Standard MLR is based upon Eq. 1 with P(t) = 0. Iterative MLR means that only terms in P(t) and the ENSO term are fitted when they are statistically significant (2σ) , while full MLR includes all terms in Eq. 1 and P(t).

zonal bands	MLR	parameters added	r^2	$[DU]^{\chi}$	trend ($t \le 1995$) [%/decade]	trend ($t \ge 1996$) [%/decade]
60°S-60°N	full iterative standard	all BDCs, BDCn, AAO	0.95 0.95 0.79	1.0 1.0 1.2	-1.6(6) -1.6(6) -2.2(6)	+0.4(3) +0.4(2) +0.3(3)
35N°S-60°N	full iterative standard	all all	0.88 0.88 0.76	3.0 3.0 4.0	-2.0(14) -2.0(14) -4.0(15)	+0.5(7) +0.5(7) +0.3(9)
20S°S-20°N	full iterative standard	all BDCs, ENSO	0.87 0.85 0.79	1.2 1.2 1.4	-1.1(8) -0.6(6) -0.8(7)	+0.2(4) +0.2(4) +0.2(4)
35S°S-60°S	full iterative standard	all AAO -	0.92 0.90 0.79	2.6 2.6 3.6	-2.7(14) -3.0(12) -3.2(16	+0.6(6) +0.6(6) +0.6(7)

bold numbers: statistical significance at 2σ