Atmospheric
Measurement
Techniques

Supplement of

Measurements of greenhouse gases at Beromünster tall-tower station in Switzerland

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1 Table. S.1. Summary of multiple linear regression results for CO, CO_2, and CH_4 derived from

2 the WG gas CH_4 mixing ratio measurements derived using equation 4

3 ($\chi_{meas}^{i'} \approx a^i \cdot T' + b^i \cdot CH_{4,WG}'$). We have calculated the p-values using the generalized least

4 square (gls) function in R-program which accounts for an autocorrelation between residuals

5 from the regression model, and it is expressed as significance codes following R

6 documentation (0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1).

Species	Cylinder	a^i (ppb K^{-1}, ppm K^{-1})	b^i (ppb ppm^{-1}, ppm ppm^{-1})
CO	WG	1.85E-03***	1.94**
	HS	2.77E-04***	-6.50E-01
	LS	1.43E-04*	-4.85E-01
	T	5.14E-04***	-1.02***
CO_2	WG	5.94E-03***	9.46E+01***
	HS	-6.47E-05	9.62E+01***
	LS	4.53E-03	2.86E+01***
	T	1.98E-03***	4.97E+01***
CH_4	T	-1.11E-05***	1.24*
	HS	1.81E-05***	7.50E-01.
	LS	-6.36E-06***	1.004.