Supplementary Materials

Spatially resolved soil solution chemistry in a central European atmospherically polluted high-elevation catchment

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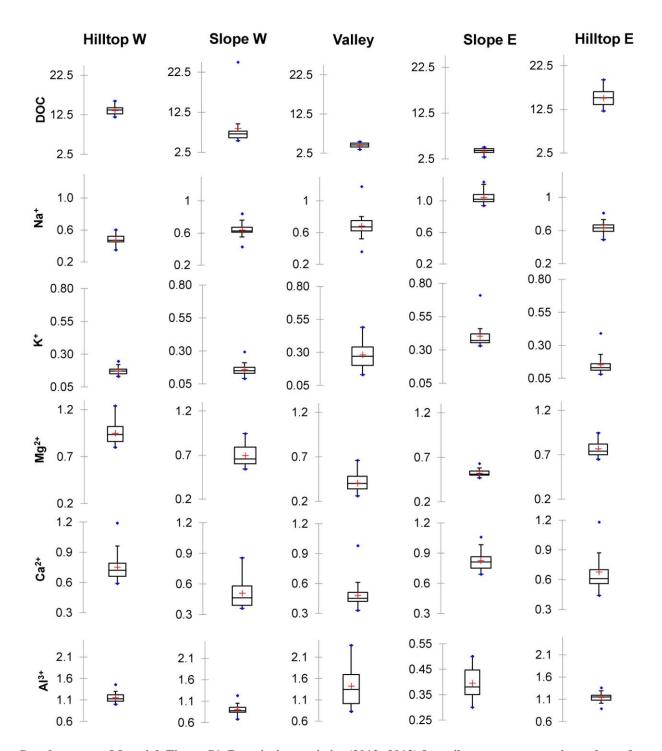
Supplementary Materials:

Figure S1 Descriptive statistics (2012- 2013) for soil water concentration values of dissolved organic carbon, sulfate, nitrate, base cations, Al and chloride (in mg L⁻¹) and pH values at the 50-cm depth at UDL.

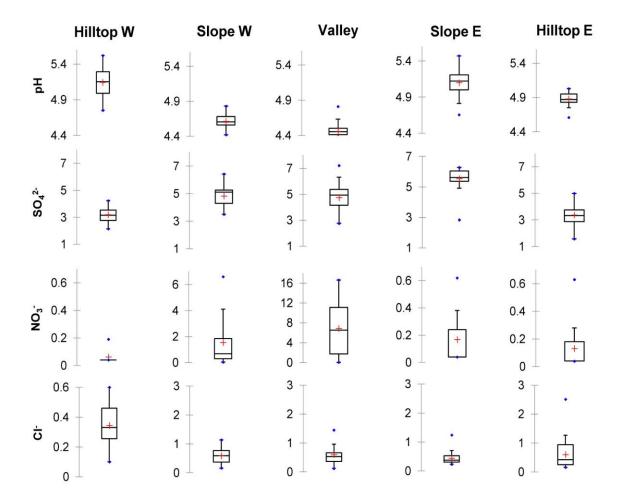
Figure S2: Non-parametric multidimensional scaling ordination of time-series hydrochemical data for runoff, atmospheric in lysimeters.

Figure S3: Comparison of monthly precipitation volumes at UDL during the monitoring period (2012-2013) *vs.* the hydrologic years 2016-2017.

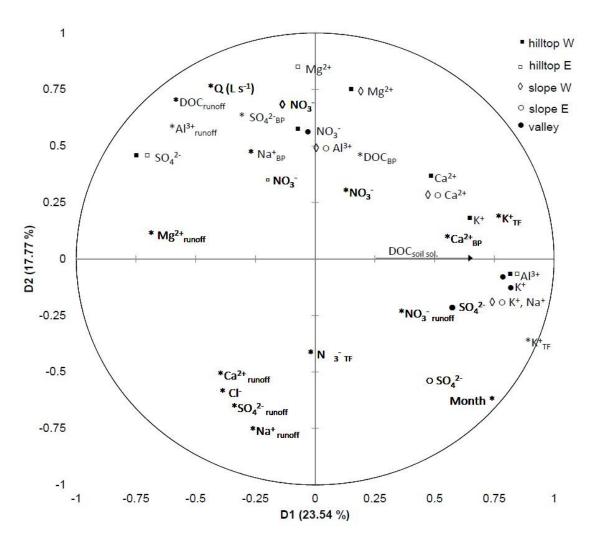
Table S1: Coefficient of variation (Cv = $100\sigma/\mu$) of inorganic species across our lysimeter network.



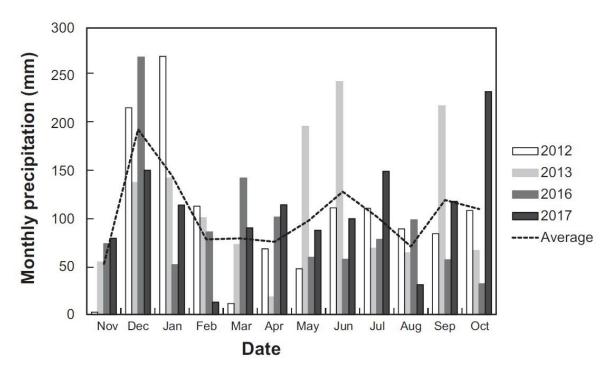
Supplementary Material. Figure S1. Descriptive statistics (2012- 2013) for soil water concentration values of dissolved organic carbon, sulfate, nitrate, base cations, Al and chloride (in mg L-1) and pH values at the 50-cm depth at UDL. The statistical distribution shows minimum, first quartile, median, third quartile and maximum for individual samples



Supplementary Material. Figure S1. Cont.



Supplementary Material. Figure S2. Non-parametric multidimensional scaling ordination of time-series hydrochemical data for runoff, atmospheric in lysimeters. Note that only varimax rotated parameters exhibiting statistical significance > 0.25 are shown. The variables describe 41.3 % of the co-variation



Supplementary Material. Figure S3. Comparison of monthly precipitation volumes at UDL during the monitoring period (2012-2013) vs. the hydrologic years 2016-2017.

Supplementary Material. Table S1. Coefficient of variation (%) of inorganic species across our lyzimeter network.

Analyte	Hilltops	Slopes	Valley
SO ₄ ² -	17	17	15
NO_3	2	15	17
Al^{3+}	8	10	12
Na^+	9	10	11
K^+	55	40	33
$Mg^{2+} \ Ca^{2+}$	12	21	15
Ca^{2+}	7	17	6

Calculation is based on six triplicates for hilltop and slopes and three triplicates for the valley location. The triplicates were obtained each fourth month.