Supplementary Materials

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

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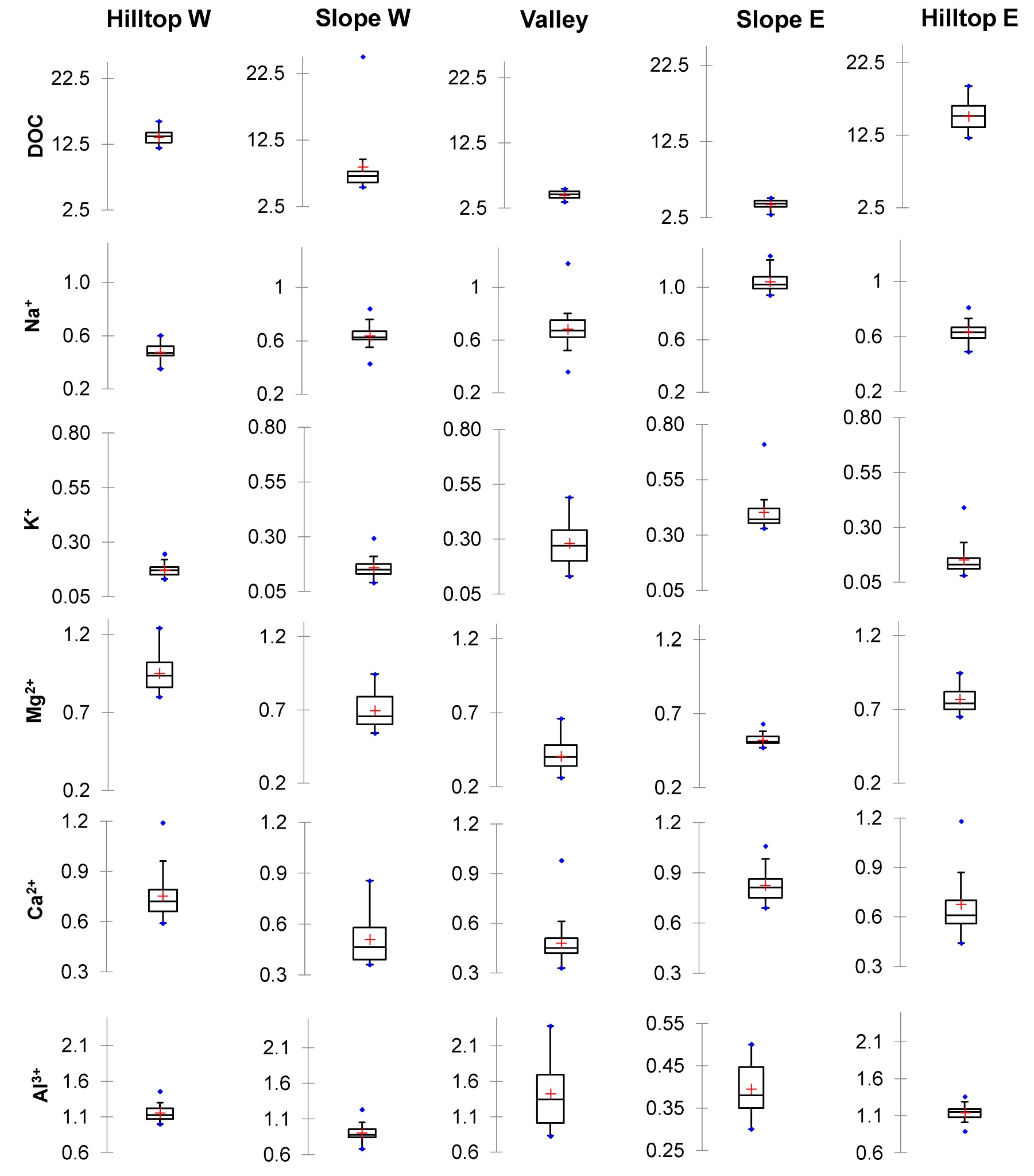
**Supplementary Materials:**

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.

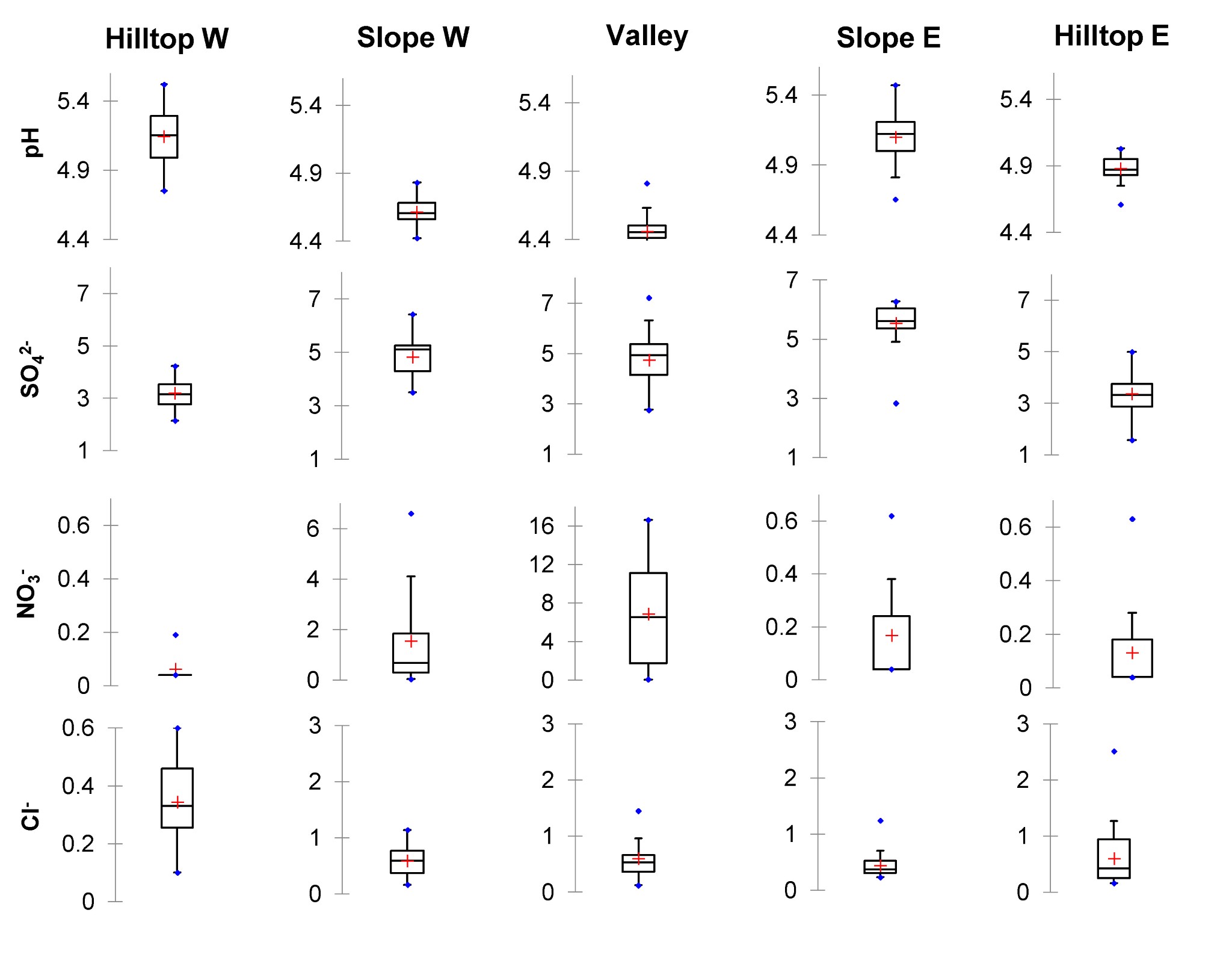
Figure S2: Non-parametric multidimensional scaling ordination of time-series hydrochemical data for runoff, atmospheric in lysimeters.

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

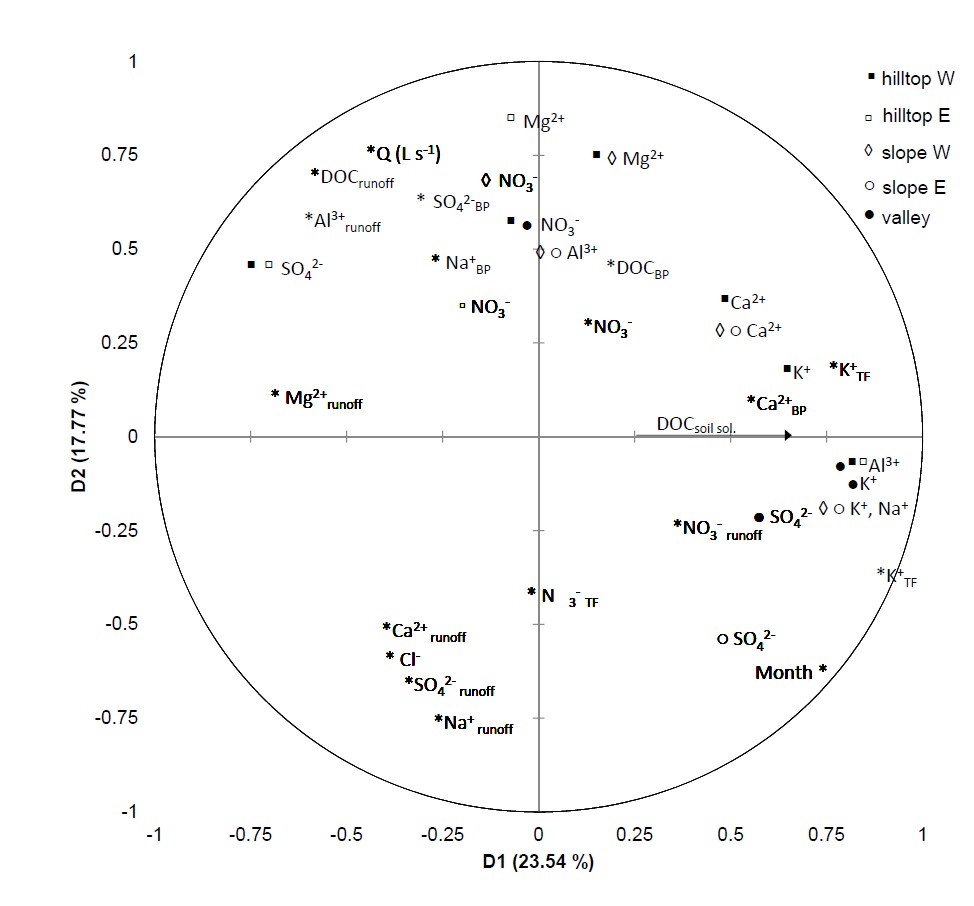
Table S1: Coefficient of variation (Cv = 100σ/μ ) of inorganic species across our lysimeter network.



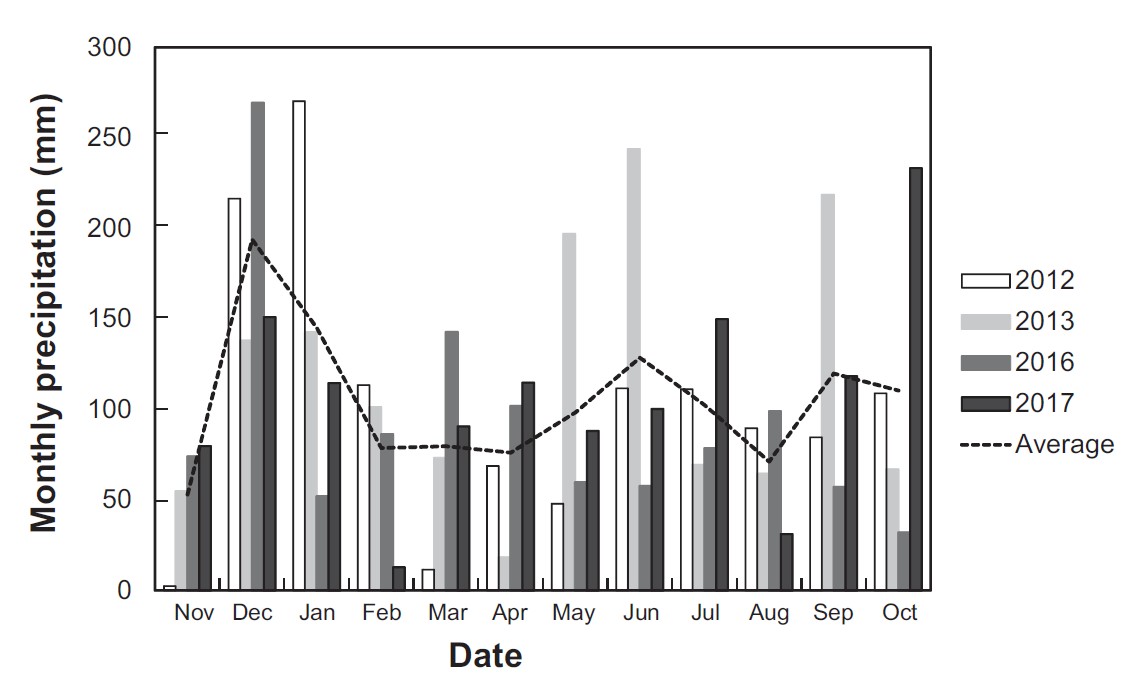
**Supplementary Material. Figure S1.** Descriptive statistics (2012- 2013) for soil water concentration values of dissolved organic carbon, sulfate, nitrate, base cations, Al and chloride (in mg L-1) and pH values at the 50-cm depth at UDL. The statistical distribution shows minimum, first quartile, 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 |
| SO42‐ | 17 | 17 | 15 |
| NO3‐ | 2 | 15 | 17 |
| Al3+ | 8 | 10 | 12 |
| Na+ | 9 | 10 | 11 |
| K+ | 55 | 40 | 33 |
| Mg2+ | 12 | 21 | 15 |
| Ca2+ | 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.