

Readme for Supplemental Material

Table S1. Descriptive Statistics for seasons, landscapes, soil horizons differentiation) & Table S3. Descriptive Statistics for 9 spatial replicates.

Column 1 "Soils properties & ChEs forms", physical and chemical soil properties, content of ChEs forms (F1-5).

Column 2 "Month", study season.

Column 3 "Position", landscape position.

Column 4 "Horizon", soil horizon.

Column 5 "Valid N", number of valid observations.

Column 6 "% Valid obs.", percentage of valid observations.

Column 7 "Mean", arithmetic mean.

Column 8 "Confidence - -95,000%", confidence limits for means:, Interval: 95%.

Column 9 "Confidence - 95,000", confidence ilimits for means:, Interval: 95%.

Column 10 "Geometric - Mean", geometric mean values.

Column 11 "Harmonic - Mean", harmonic mean values.

Column 12 "Median", median value

Column 13 "Mode", mode value

Column 14 "Frequency - of Mode", frequency of mode value

Column 15 "Sum", sum of the analyzed variable values

Column 16 "Minimum"

Column 17 "Maximum"

Column 18 "Lower - Quartile"

Column 19 "Upper - Quartile"

Column 20 "Percentile - 10,00000", first percentile

Column 21 "Percentile - 90,00000",second percentile

Column 22 "Range", range of values.

Column 23 "Quartile - Range" interquartile range of values.

Column 24 "Variance"

Column 25 "Std.Dev.", Standard Deviation.

Column 26 "Confidence SD - -95,000%", confidence interval for samples standard deviation, Interval: 95%

Column 27 "Confidence SD - +95,000%", confidence interval for samples standard deviation, Interval: 95%

Column 28 "Coef.Var.", coefficient of variation.

Column 29 "Standard - Error", standard error of the mean.

Column 30 "Skewness"

Column 31 "Std.Err. - Skewness", standard error of the skewness coefficient.

Column 32 "Kurtosis"

Column 33 "Std.Err. - Kurtosis", standard error of the kurtosis coefficient.

Table S6. Significance of lateral differences for all seasons and all horizons.

Column 1 "ChEs forms", content of ChEs forms (F1-5)

Column 2 "Month", study season.

Column 3 "Horizon", soil horizon.

Column 4 "No. of - Non-ties", number of observations of both samples, excluding replicates.

Column 5 "Percent - $v < V$.", proportion of cases when the value of the first of the selected variables is less than the value of the second.

Column 6 "Z", quantile of a normal distribution with a probability level of $p = 1 - p\text{-level}$.

Column 7 "p-level", chance of error upon rejection of the null hypothesis.