**Table S11: p-values of post-hoc tests for differences between the mean Ctot of long chain *n*-alkanoic acids and horizons and vegetation types (top) and Ctot and horizons within the same vegetation type (bottom), p<0.05 indicates a significant relationship at the 95% confidence level (bold values), con= coniferous trees, dec= deciduous trees, grass= grasslands, L: litter, Ah1= topsoil 1 (0-3 cm), Ah2= topsoil 2 (3-10 cm).**

|  |  |  |  |
| --- | --- | --- | --- |
| **Vegetation types** | | | |
|  | **L** | **Ah1** | **Ah2** |
| con-dec | 0.60 | **0.01** | **0.012** |
| con-grass | - | **1.7e-07** | **0.0007** |
| dec-grass | - | **0.0004** | 0.19 |
| **Horizons** | | | |
|  | **con** | **dec** | **grass** |
| L-Ah1 | 0.047 | **1.4e-07** | - |
| L-Ah2 | **0.02** | **3.5e-12** | - |
| Ah1-Ah2 | 0.93 | **0.003** | 0.19 |