|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| name | pH | Water content (%) | Total C (%) | Total N (%) | C:N ratio | Org. C (%) | Org. N (%) | DOC (mg/kg) | Density (gr/ml) |
| Abisko | 4.7 | 48.0 | 47.3 | 0.7 | 65.3 | 47.3 | 0.7 | 122.0 | 0.8 |
| Iceland Forest | 5.9 | 36.3 | 9.9 | 0.7 | 15.2 | 9.9 | 0.7 | 44.0 | 1.5 |
| Iceland Grassland | 6.8 | 37.6 | 34.2 | 2.2 | 15.4 | 33.7 | 2.2 | 17.3 | 1.4 |
| Inuvik | 5.2 | 74.9 | 43.1 | 1.2 | 36.2 | 11.5 | 0.8 | 103.2 | NA |
| Kilpisjarvi | 4.2 | 40.4 | 12.3 | 0.6 | 21.5 | 15.5 | 0.5 | 117.3 | NA |
| Kobbefjord | 4.6 | 38.0 | 12.5 | 0.5 | 23.4 | 16.6 | 0.6 | 67.8 | NA |
| Østerlien | 6.3 | 58.7 | 22.9 | 1.2 | 19.0 | 9.1 | 0.7 | 47.4 | NA |
| Svalbard | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Svanhovd | 3.9 | 73.1 | 36.3 | 1.0 | 36.5 | 37.3 | 1.0 | 193.3 | NA |
| Toolik Lake Heath | 4.9 | 36.8 | 11.4 | 0.5 | 23.6 | 11.4 | 0.5 | 82.7 | 1.2 |
| Toolik Lake MAT | 5.3 | 67.8 | 7.6 | 0.3 | 27.1 | 7.6 | 0.3 | 77.0 | 0.7 |
| Toolik Lake MNAT | 7.1 | 63.9 | 13.5 | 0.5 | 27.5 | 13.0 | 0.5 | 36.1 | 1.1 |

**Supplementary Table 1.** Characteristics of the soil types