|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Pool* | *Mean* | *Standard Deviation* | *Average Sample Size* | *No. of Sites* |
| % Total Soil N | 0.24 | 0.26 | 11 | 39 |
| % Inorganic Soil N | 6.62 | 6.67 | 11 | 37 |
| % Root N | 0.9 | 0.24 | 23 | 31 |
| % Leaf N | 1.73 | 0.48 | 16 | 31 |
| % Litter N | 0.84 | 0.26 | 19 | 21 |
| Soil C:N | 19.05 | 6.23 | 12 | 21 |
| Root C:N | 56.6 | 14.83 | 23 | 31 |
| Leaf C:N | 32.67 | 12.52 | 16 | 31 |
| Litter C:N | 71.64 | 31.77 | 19 | 21 |

**Table 1. Mean, SD, sample size, and no. sites for each of the N or C:N pools.**

Table SX. OLS model outputs for all relationships assessed between mean values of pools.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Dependent* | *Independent* | *N* | *Slope* | *T-value* | *P-value* | *R-squared* |
| % Foliar N | % Total soil N | 28 | 0.35 | 0.96 | 0.35 | 0 |
| % Root N | % Total soil N | 26 | 0.4 | 0.9` | 0.38 | 0 |
| % Foliar N | Inorganic soil N | 28 | 0.0064 | 0.6 | 0.56 | 0 |
| % Root N | Inorganic soil N | 25 | 0.019 | 1.5 | 0.15 | 0.05 |
| Inorganic soil N | % Litter N | 13 | 0.81 | 1.04 | 0.32 | 0.007 |
| % Total soil N | % Litter N | 14 | 0.009 | 0.089 | 0.93 | 0 |
| **% Foliar N** | **% Root N** | **24** | **1.66** | **3.29** | **0.0034** | **0.3** |
| % Total soil N | % Foliar N | 27 | 0.098 | 0.96 | 0.35 | 0 |
| Inorganic soil N | % Foliar N | 26 | 2.78 | 1.6 | 0.1 | 0.074 |
| Foliar C:N | Soil C:N | 28 | 0.012 | 1.5 | 0.15 | 0.04 |
| **Root C:N** | **Soil C:N** | **26** | **1.2** | **4.43** | **< 0.001** | **0.43** |
| **Root C:N** | **Foliar C:N** | **24** | **0.019** | **3.73** | **0.001** | **0.36** |
| **Soil C:N** | **Litter C:N** | **15** | **0.17** | **3.7** | **0.0027** | **0.48** |
| Foliar C:N | Soil C:N | 28 | 0.21 | 1.55 | 0.13 | 0.05 |

Table SX. LME model outputs for bivariate relationships.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Dependent* | *Independent* | *Sites* | *Slope* | *T-value* | *P-value* | *Marginal* | *Conditional* | *% Random* |
| Foliar N | Root N | 24 | 0.18 | 1.55 | 0.12 | 0.016 | 0.7 | 0.98 |
| Root N | Soil N | 26 | 0.31 | 1.53 | 0.13 | 0.019 | 0.64 | 0.97 |
| **Leaf** | **Soil N** | **28** | **0.36** | **2.76** | **0.006** | **0.03** | **0.5** | **0.94** |
| Root | Inorganic soil N | 27 | 0.0025 | 0.56 | 0.56 | 0.019 | 0.64 | 0.97 |
| **Leaf** | **Inorganic soil N** | **28** | **0.01** | **2.83** | **0.005** | **0.029** | **0.48** | **0.94** |
| Soil N | Litter N | 15 | -0.073 | -0.36 | 0.72 | 0.019 | 0.64 | 0.97 |
| **Folar C:N** | **Root C:N** | **24** | **0.0041** | **2.068** | **0.04** | **0.022** | **0.72** | **0.97** |
| **Root C:N** | **Soil C:N** | **26** | **0.88** | **4.27** | **0** | **0.22** | **0.63** | **0.74** |
| **Foliar C:N** | **Soil C:N** | **28** | **0.016** | **4.05** | **0** | **0.093** | **0.5** | **0.84** |
| **Soil C:N** | **Litter C:N** | **15** | **0.05** | **2.1** | **0.04** | **0.054** | **0.67** | **0.93** |

Notes:

Site is an important factor

Can we explain any of these site factors with covariates

Partial regressions for graphically showing effect of X after controlling for Y

Do a step AIC

Show that other climate variables are correlated with MAP: make a correlation matrix

Can look at a variance factor analysis

Double check % random from the model output

Play around with partial regression figures

1/25/2022

-Need to adopt and automate the model selection procedure the Adrienne developed for LMEs

-Ideally, a function could be created that could spit out a final model, then we can go from there in terms of partial regressions

-Also want to first look at correlations among the main effects, and among the potential climate covariates