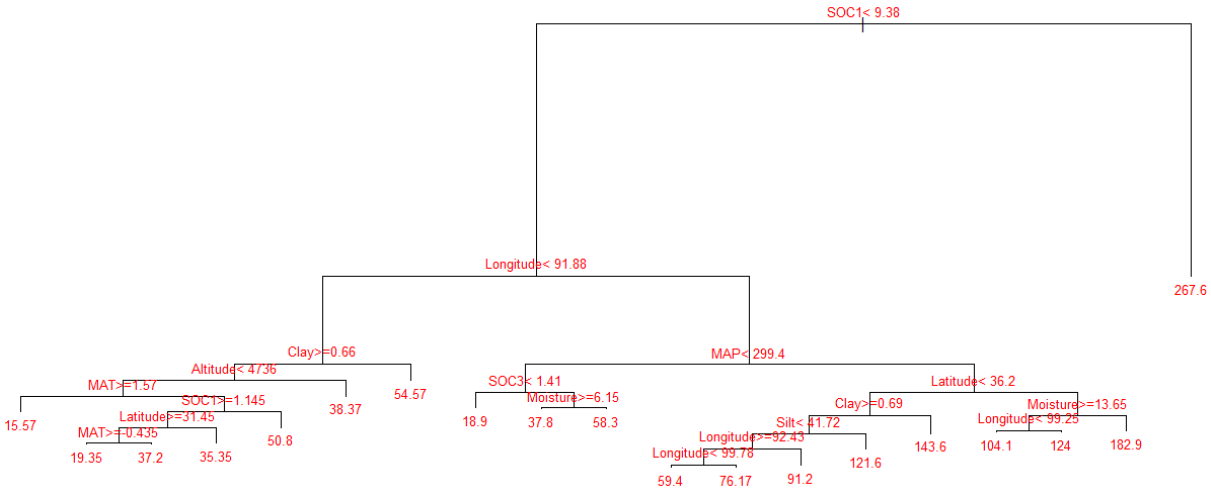
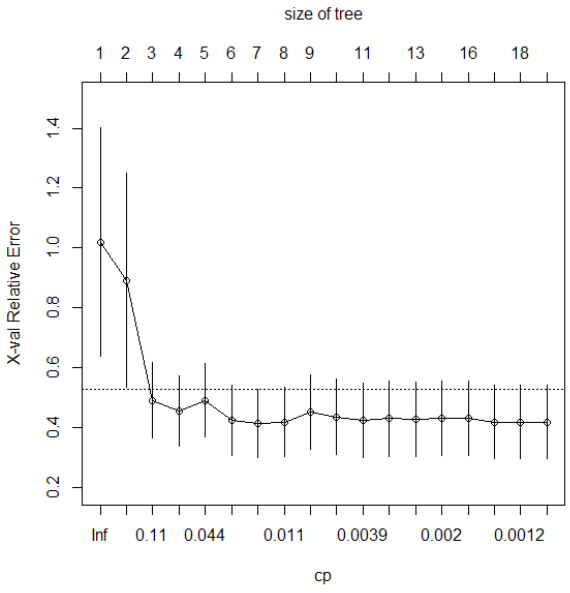
SUPPORTING INFORMATION

S1



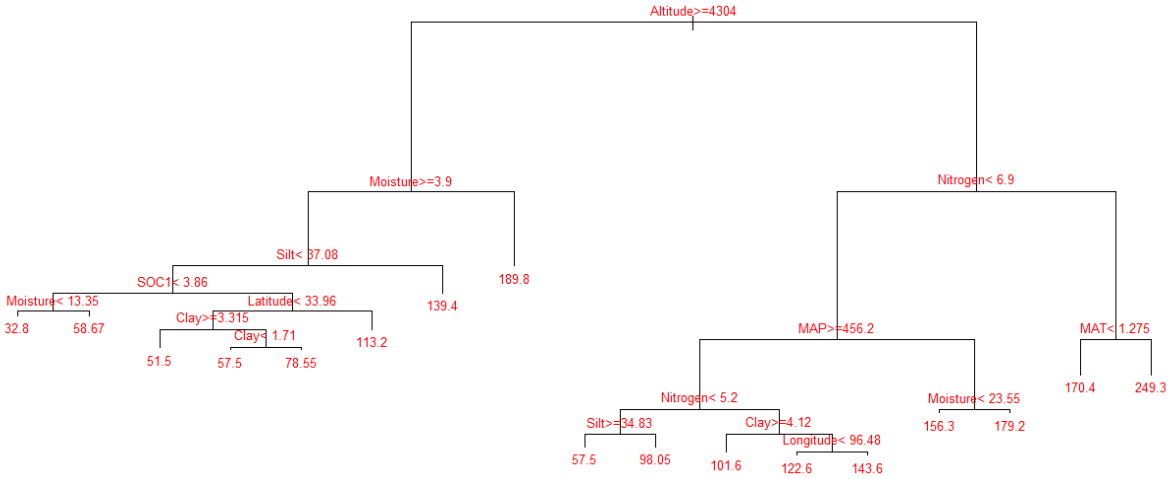
The relationships between AGB (aboveground biomass) and the environmental factors were analyzed via the CART (the classification and regression tree) analysis in alpine steppe, the graph showed the un-pruned tree. In the graph, the environmental factors were SOC1 (soil organic carbon density in the depth 30cm), SOC3 (soil organic carbon density in the depth 100 cm), MAT (mean annual temperature), MAP (mean annual precipitation), longitude, altitude, latitude, moisture, clay and silt.

S2



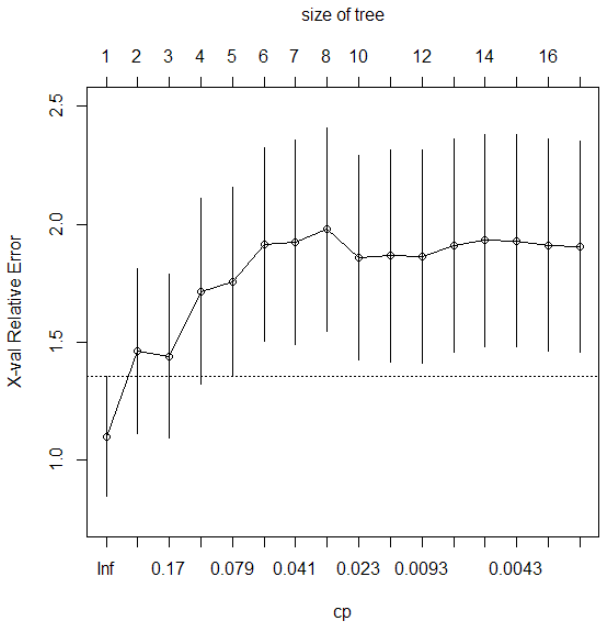
The graph showed that the tree size and relative error in the process of the CART (classification and regression tree) analysis of alpine steppe. The y-axis label was the value of relative error, the above x-axis label was size of tree and the below x-axis label was *cp* value.

S3



The relationships between AGB (aboveground biomass) and the environmental factors were analyzed via the CART (the classification and regression tree) analysis in alpine meadow, the graph showed the un-pruned tree. In the graph, the environmental factors were SOC1 (soil organic carbon density in the depth 30cm), , MAP (mean annual precipitation), MAT (mean annual temperature), longitude, altitude, latitude, moisture, clay, silt and nitrogen.

S4



The graph showed that the tree size and relative error in the process of the CART (classification and regression tree) analysis of alpine meadow. The y-axis label was the value of relative error, the above x-axis label was size of tree and the below x-axis label was *cp* value.