|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Variables | Axis.1 | Axis.2 | *r2* | *P* |
| Mean annual air temperature (MAAT) | 0.54  | -0.84  | 0.07  | 0.02  |
| Free aluminum (Ald) | 0.73  | -0.68  | 0.05  | 0.08  |
| Mean annual precipitation (MAP) | 0.43  | -0.90  | 0.05  | 0.09  |
| Carbon:nitrogen ratio (C/N) | -0.22  | -0.98  | 0.04  | 0.15  |
| Amorphous iron:free iron ratio (Feo/Fed) | -0.76  | 0.65  | 0.04  | 0.17  |
| Humic acid (HA) | -0.31  | 0.95  | 0.03  | 0.20  |
| Total nitrogen (TN) | 0.58  | 0.81  | 0.03  | 0.23  |
| Clay proportion (Clay) | 0.36  | -0.93  | 0.03  | 0.23  |
| Soil pH (pH) | -0.12  | 0.99  | 0.03  | 0.23  |
| Humic acid:fulvic acid ratio (HA/FA) | -0.21  | 0.98  | 0.03  | 0.28  |
| Free iron (Fed) | 0.65  | -0.77  | 0.02  | 0.30  |
| Amorphous aluminum (Alo) | -0.38  | -0.93  | 0.02  | 0.39  |
| Amorphous iron (Feo) | -0.80  | -0.60  | 0.01  | 0.52  |
| Dissolved organic carbon (DOC) | 0.08  | 1.00  | 0.01  | 0.52  |
| Total dissolved nitrogen (TDN) | 0.57  | 0.82  | 0.01  | 0.54  |
| Sand proportion (Sand) | -0.01  | 1.00  | 0.01  | 0.58  |
| Available potassium (AK) | 0.97  | 0.23  | 0.01  | 0.63  |
| Silt proportion (Silt) | -0.84  | -0.54  | 0.01  | 0.74  |
| Fulvic acid (FA) | 0.16  | -0.99  | 0.01  | 0.74  |
| Organic carbon (OC) | 0.98  | 0.20  | 0.00  | 0.89  |