

Table S14. The relative importance and significance of driving factors based on the Random Forest model in grassland system.

Variables	%IncMSE	%IncMSE.pval	IncNodePurity	IncNodePurity.pval
Gs	17.5655485	0.00990099	4.314232449	0.00990099
Pn	13.9644029	0.00990099	4.403869293	0.00990099
T	11.7070696	0.00990099	2.916554934	0.2970297
WM	9.9377143	0.00990099	1.287274325	0.00990099
ST	9.3135958	0.00990099	0.881863701	0.10891089
eCO ₂	8.9840338	0.0990099	1.526427824	0.76237624
MAT	8.6516534	0.00990099	0.9152155	0.08910891
eT	8.1550317	0.02970297	1.292463265	0.25742574
Latitude	7.0852527	0.00990099	0.61572788	0.46534653
High	7.0037494	0.02970297	0.872721582	0.16831683
Longitude	5.6388685	0.01980198	0.501478474	0.40594059
SWC	4.9787	0.43564356	0.811728884	1
MAP	4.7900054	0.06930693	0.376846132	0.88118812
WD	4.7101713	0.10891089	0.266105733	0.98019802
Climate	4.4276627	0.00990099	0.263917473	0.24752475
pH	1.8676304	0.14851485	0.007111521	1
P_type	1.689863	0.48514851	0.227807454	0.9009901
FN	1.2835435	0.22772277	0.02212249	0.81188119
Chlorophyll	0.9651374	0.31683168	0.747014558	0.24752475
FV/FM	0.7236888	0.41584158	0.057838869	0.83168317