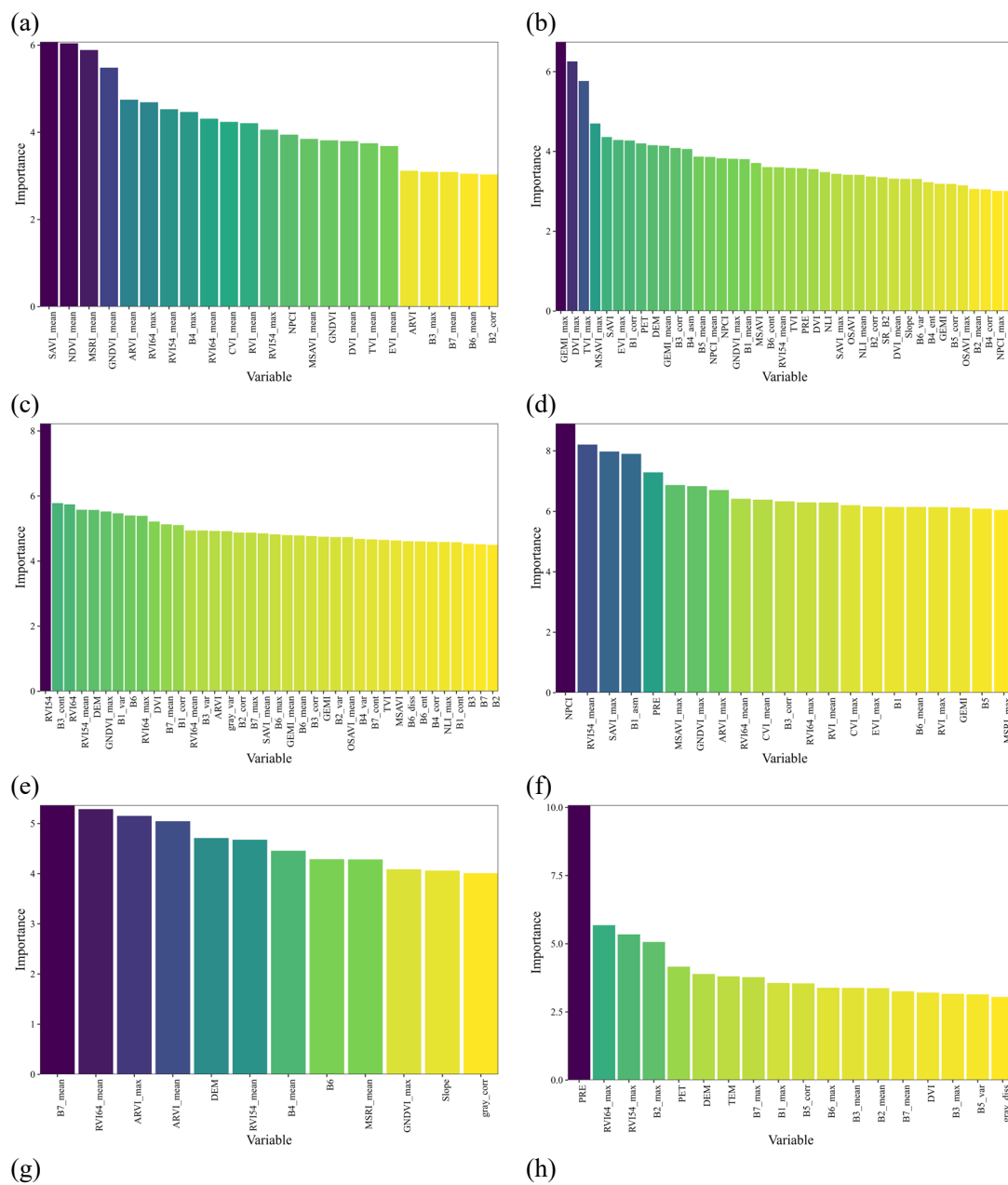


Supplementary Materials: Results of variable selection and important values

The Boruta and Recursive Feature Elimination algorithms were used to determine variable selection results and importance values for the carbon density of four grassland components, both stratified by type (a.temperate grassland; b.alpine meadow steppe; c.lowland meadow; d.alpine meadow; e.mountain meadow; f.shrubby grassland; g.temperate desert) and overall (g.without distinguishing grassland types).



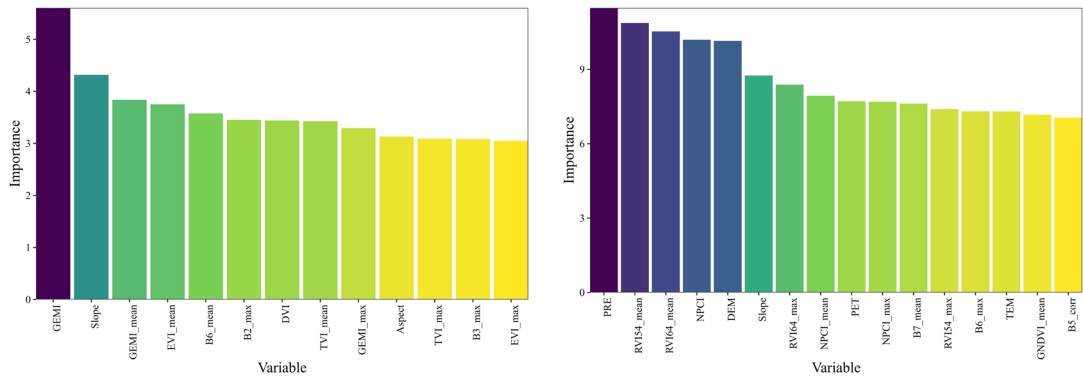
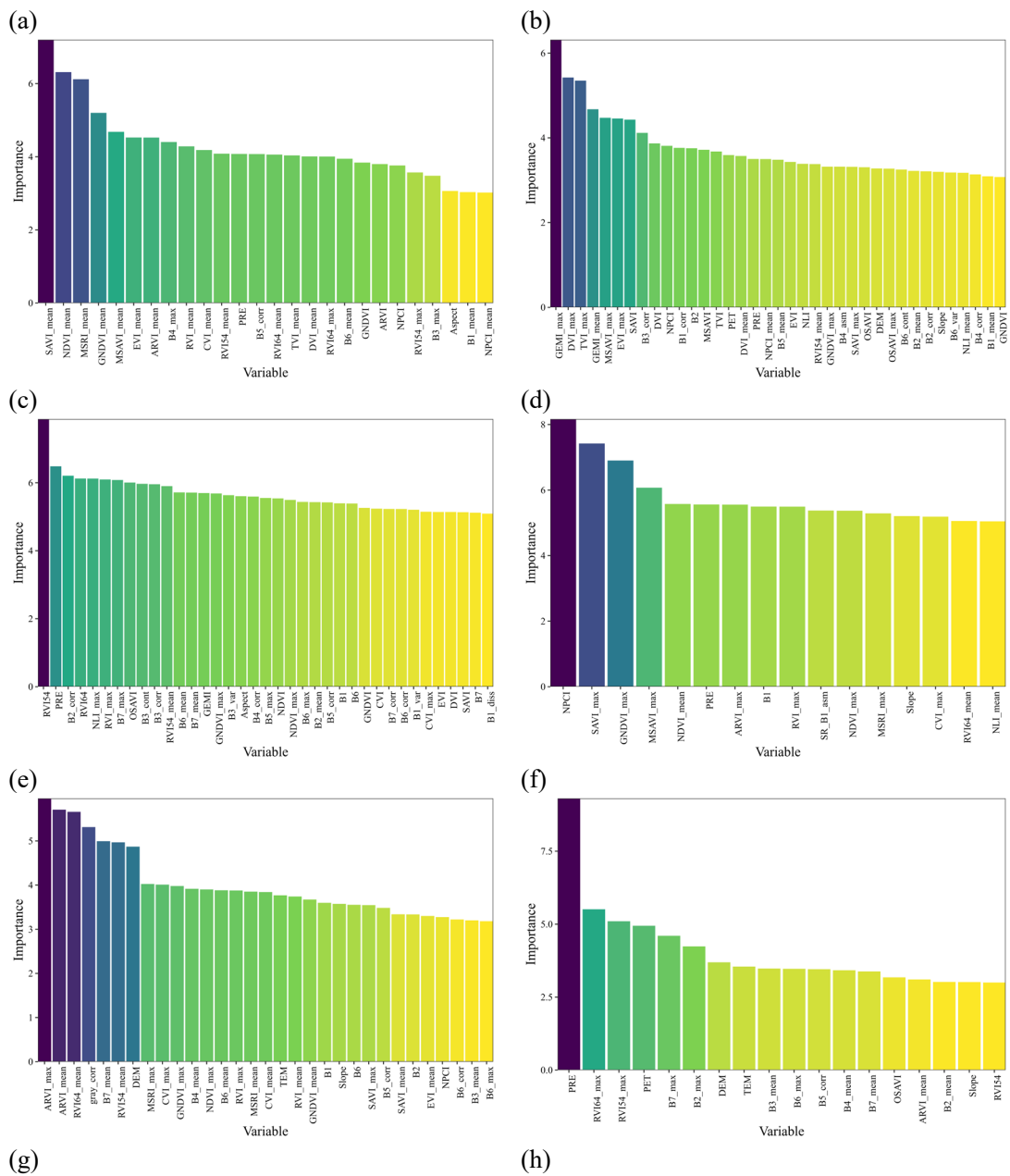
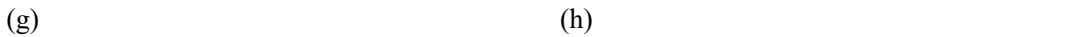
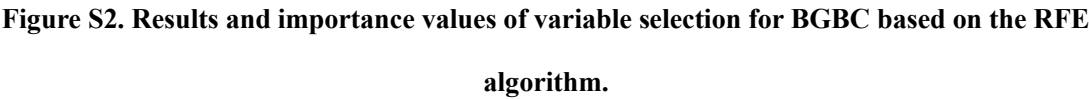


Figure S1. Results and importance values of variable selection for AGBC based on the RFE algorithm.





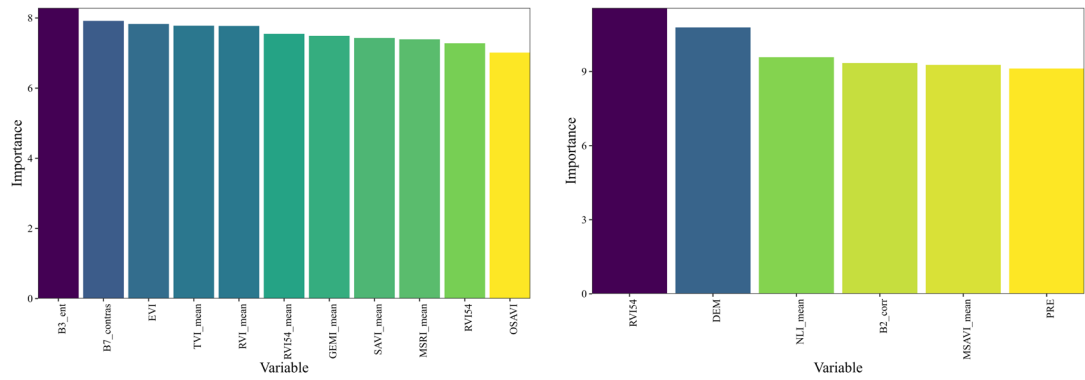
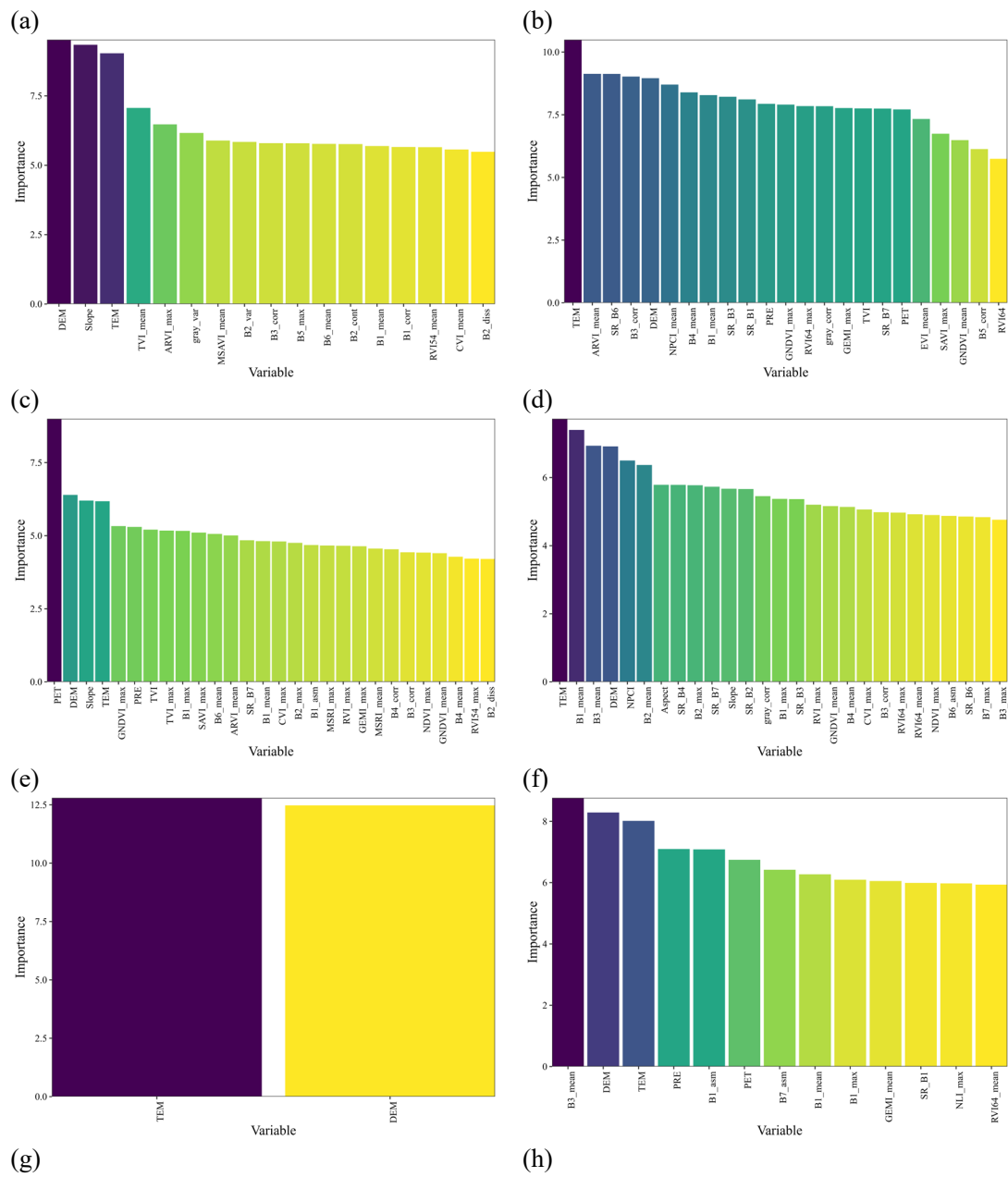


Figure S3. Results and importance values of variable selection for DOMC based on the RFE algorithm.



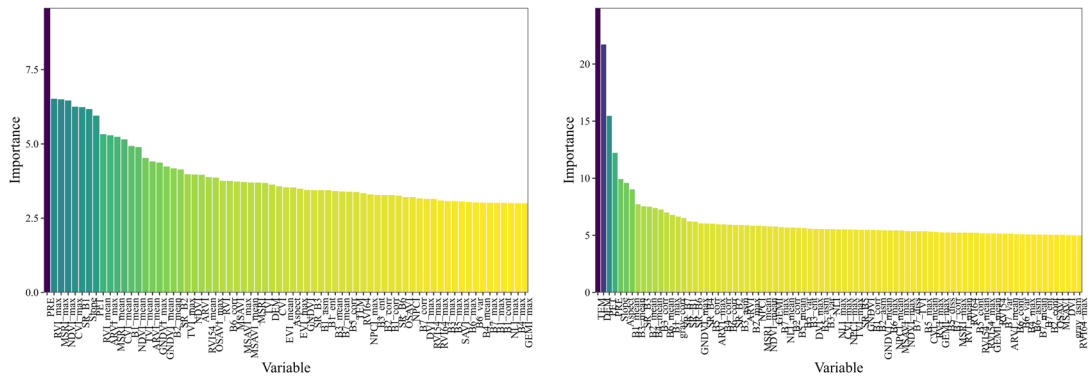
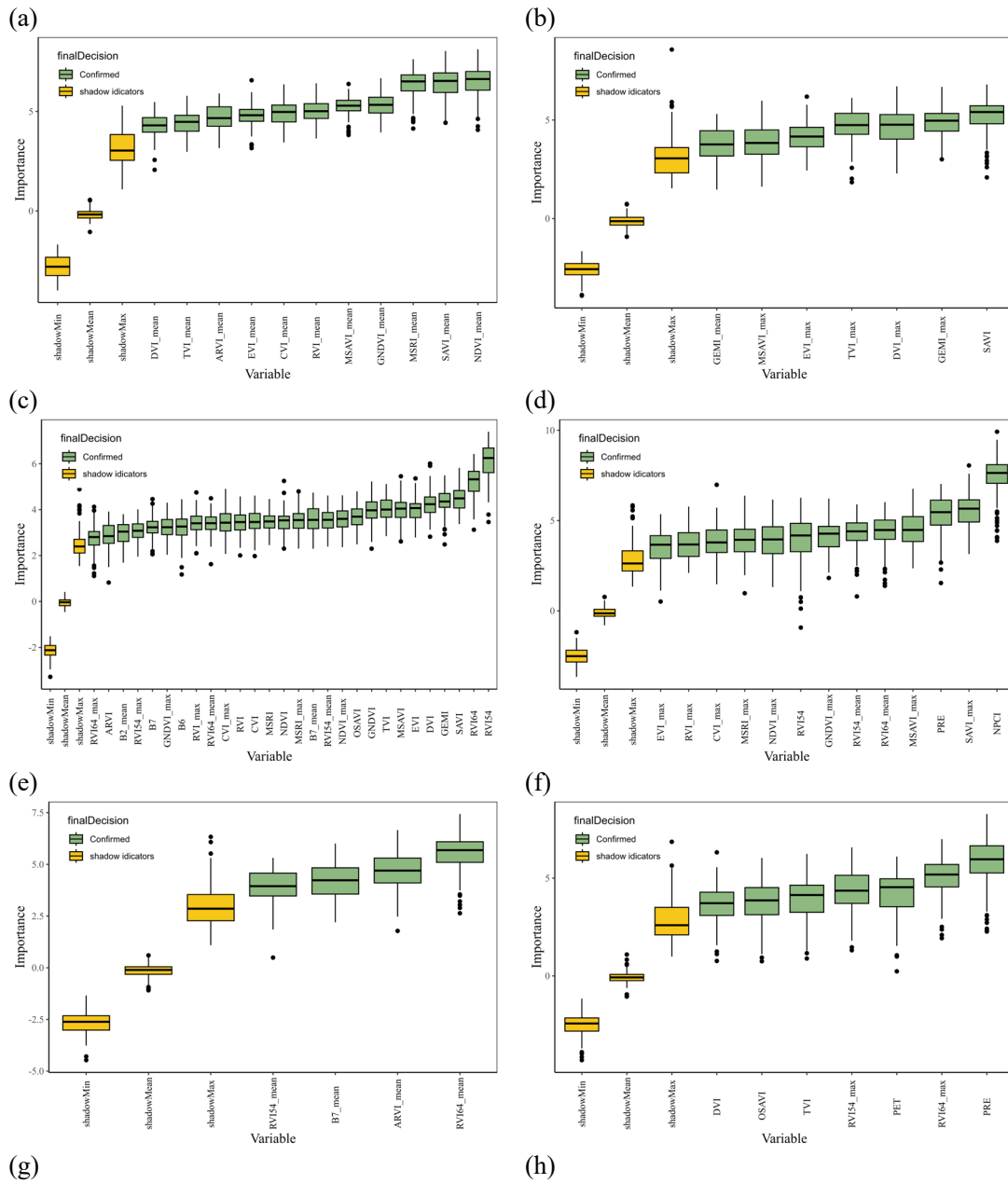
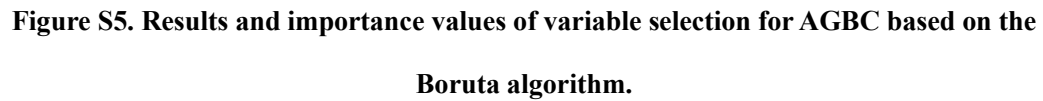


Figure S4. Results and importance values of variable selection for SOC based on the RFE algorithm.





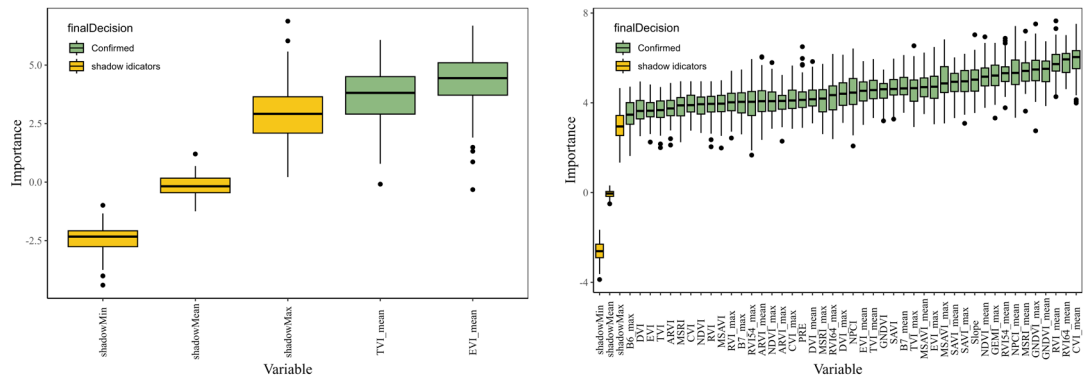
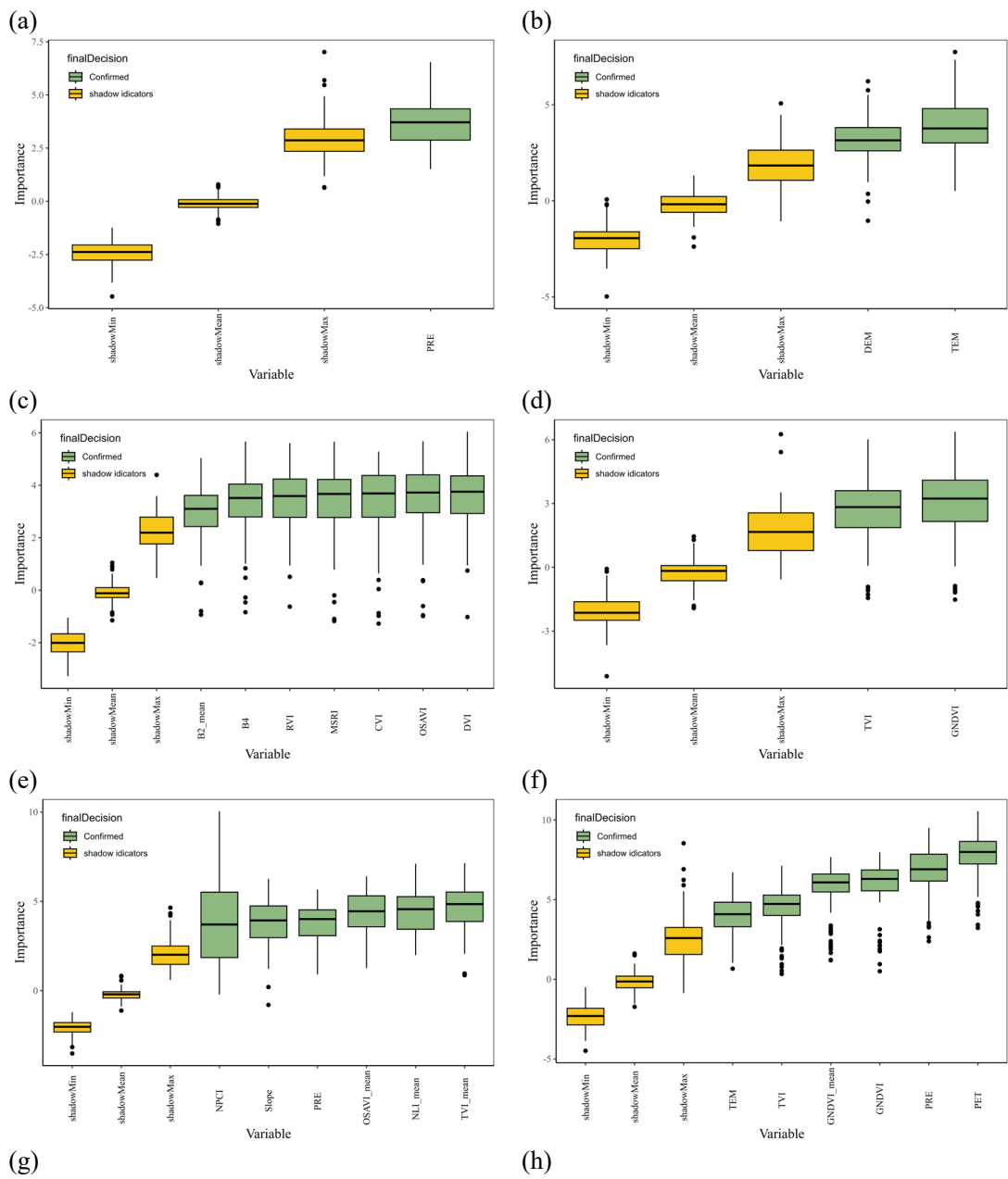


Figure S6. Results and importance values of variable selection for BGBC based on the Boruta algorithm.



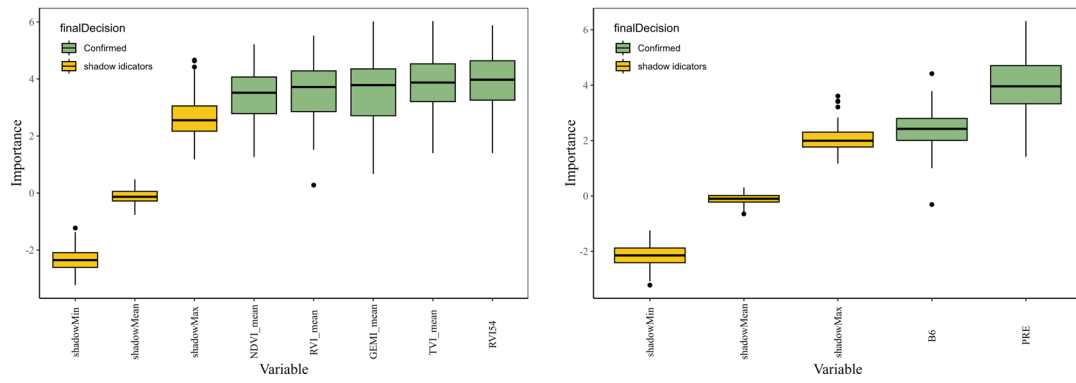
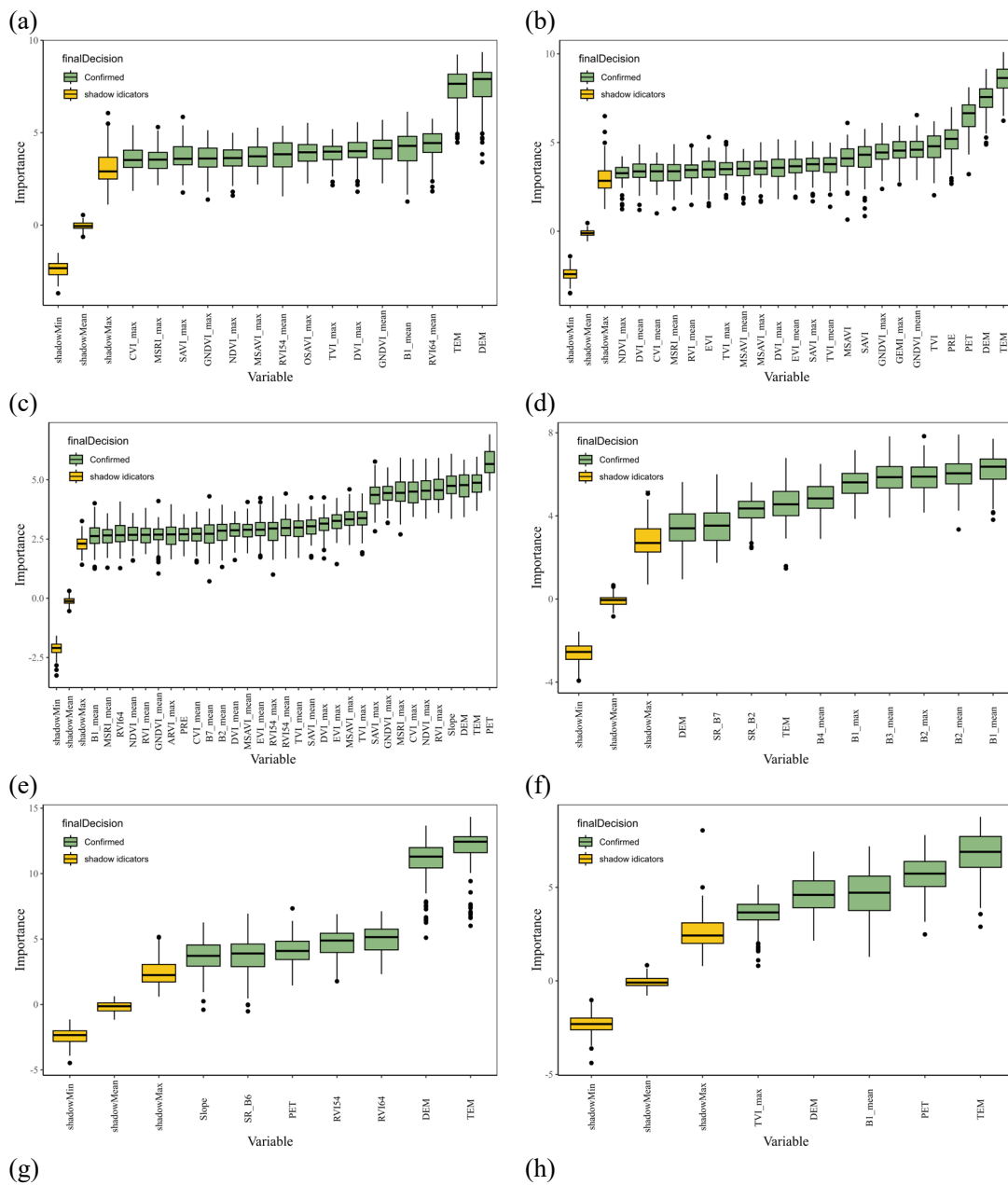


Figure S7. Results and importance values of variable selection for DOMC based on the Boruta algorithm.



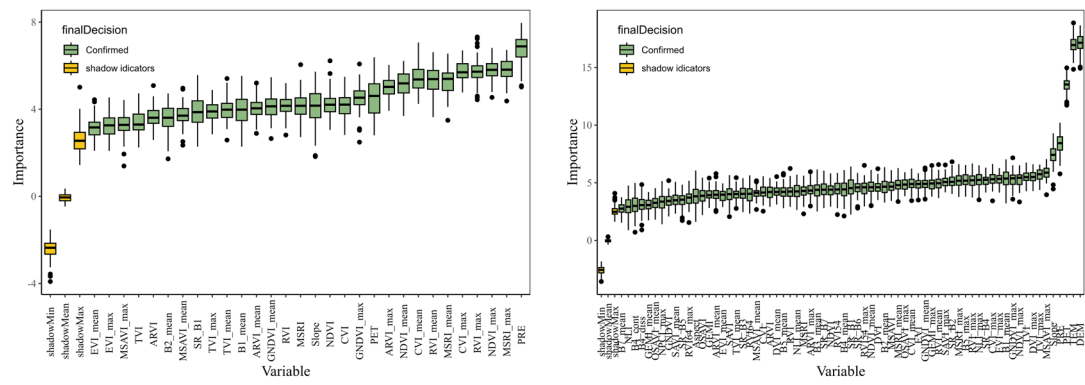


Figure S8. Results and importance values of variable selection for SOC based on the Boruta algorithm.