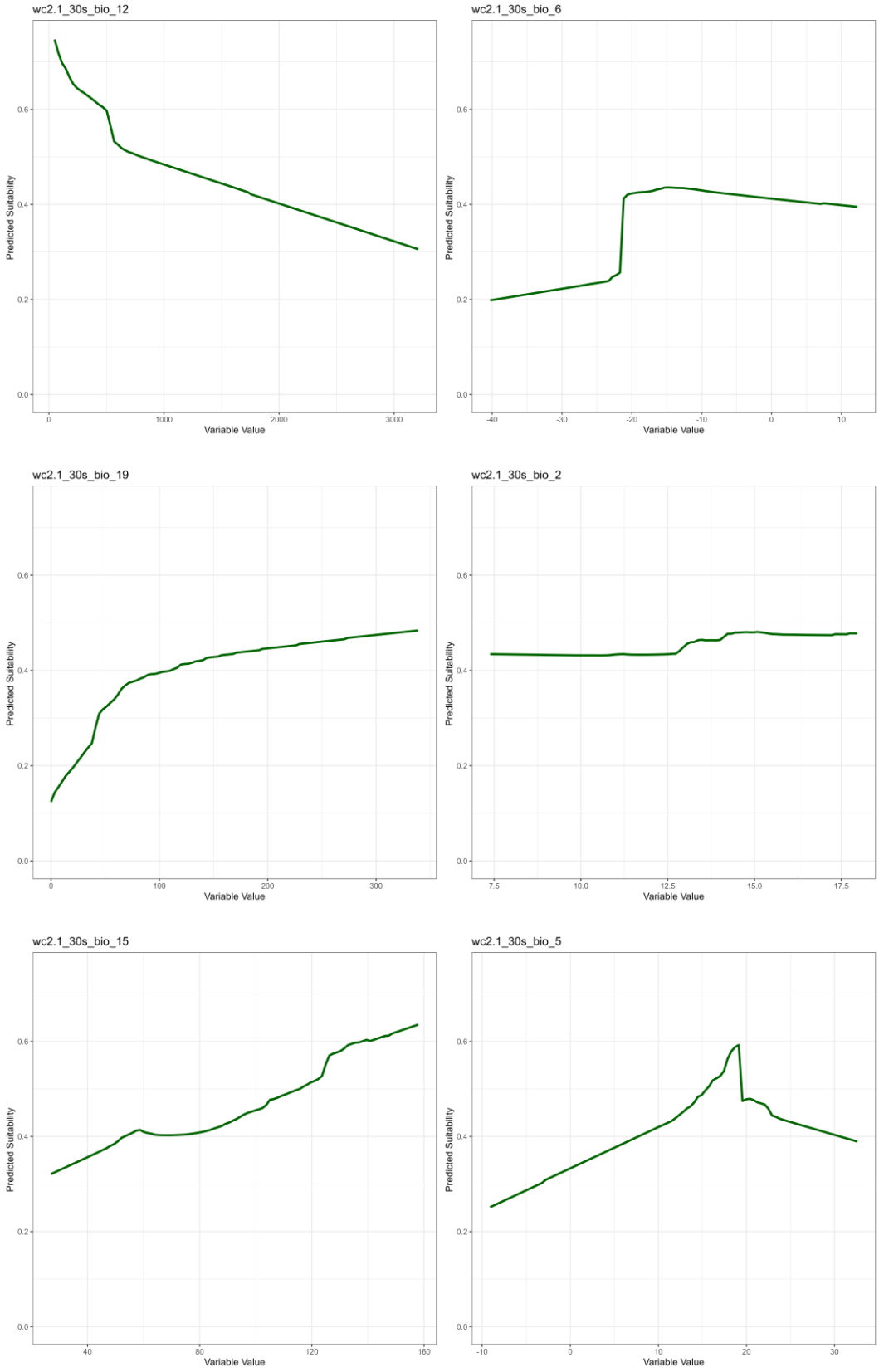
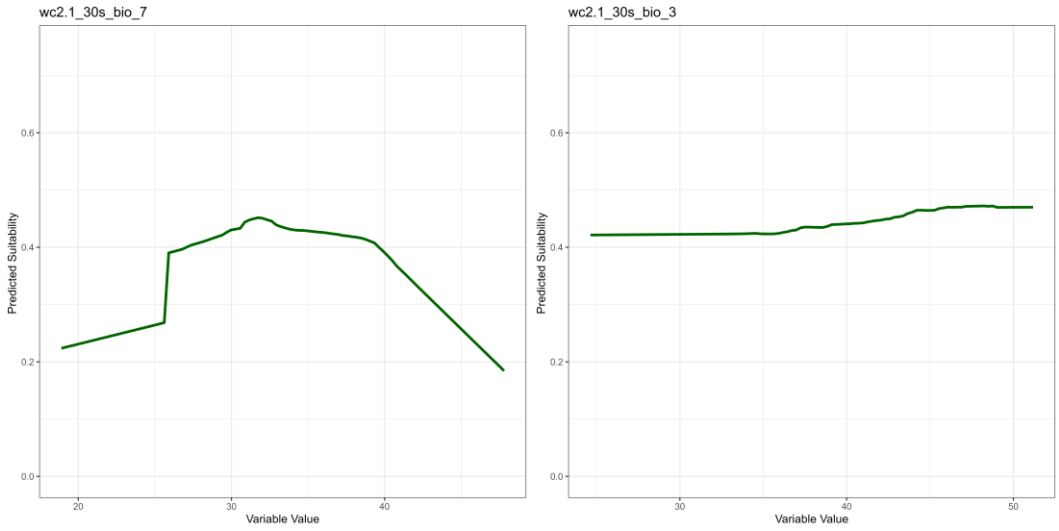
Supplementary

(a) Model contribution > 10 %



(b) Model contribution ≥ 5 %



(c) Model contribution < 5 %

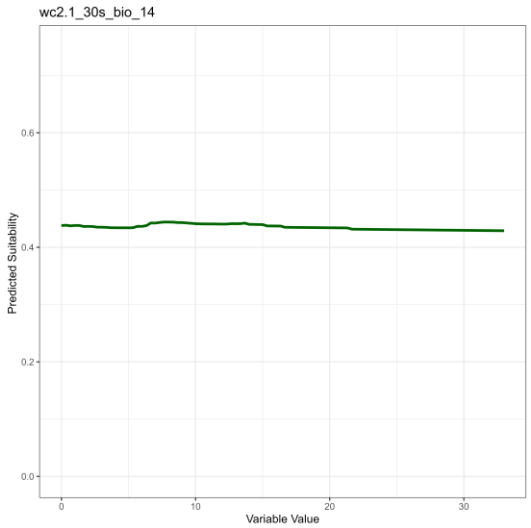
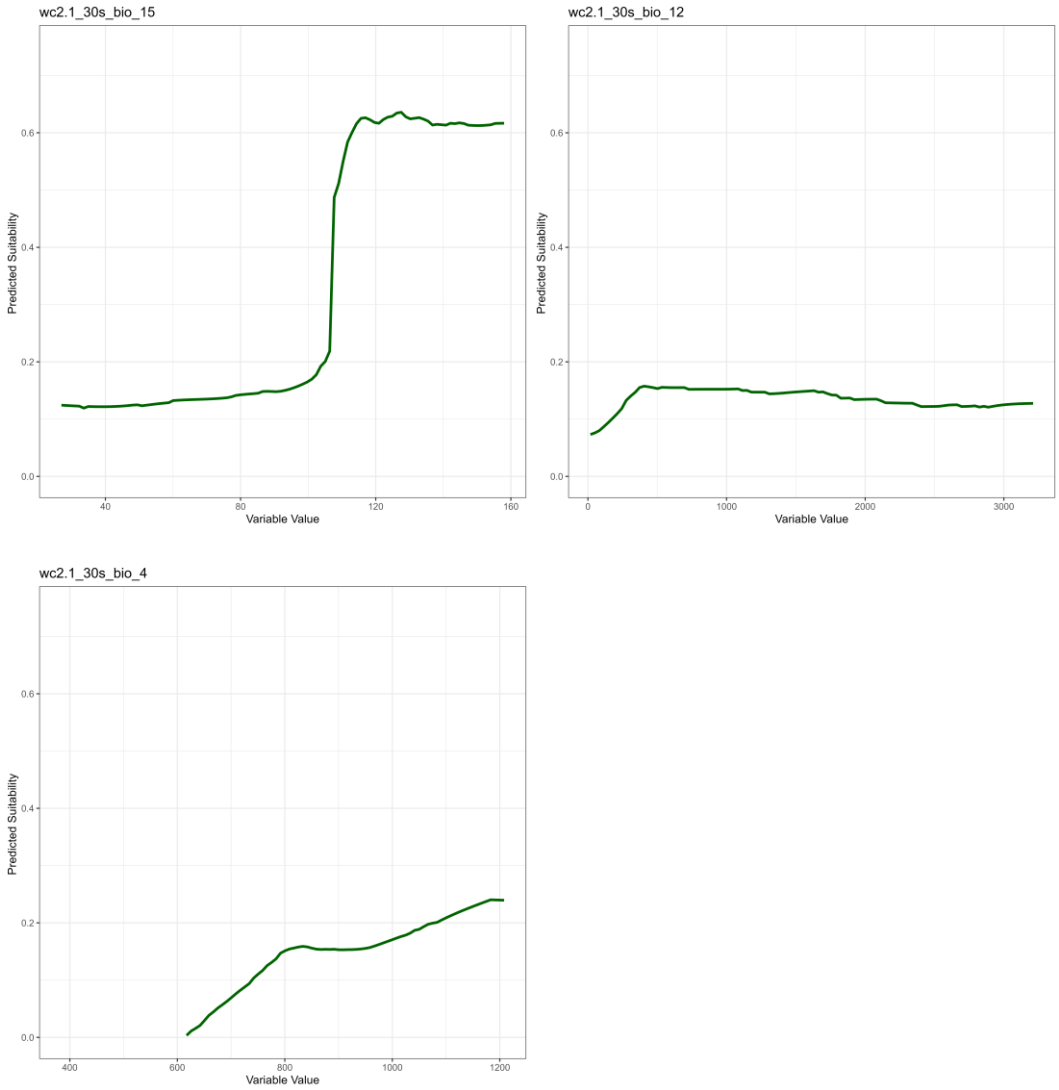
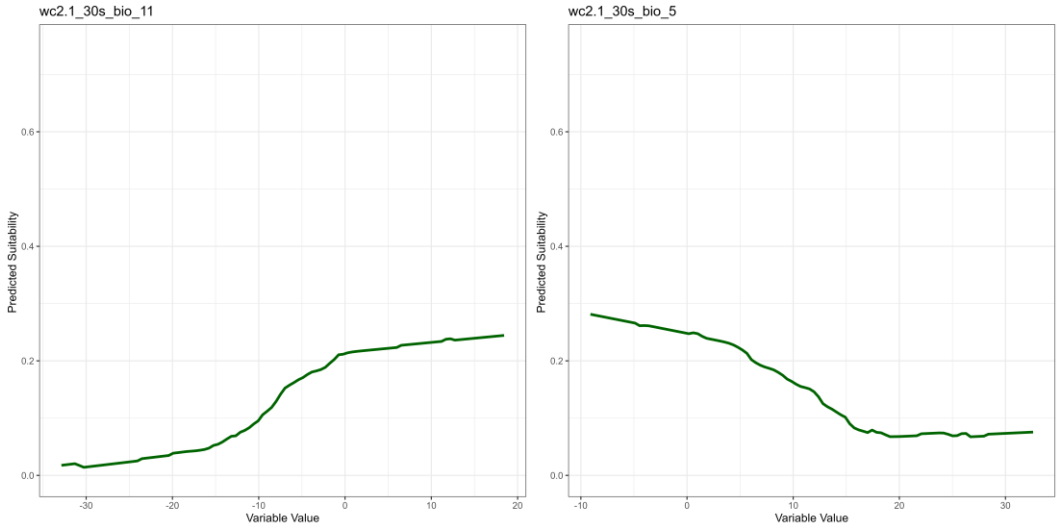


Figure S1. Response curves of the environmental variables of traditional SDMs in *Phrynocephalus theobaldi*. We divided them into three categories according to the contribution rate to the model, (a): variables of model contribution > 10 %; (b): variables of model contribution ≥ 5 %; (c): variables of model contribution < 5 %.

(a) Model contribution > 10 %



(b) Model contribution ≥ 5 %



(c) Model contribution < 5 %

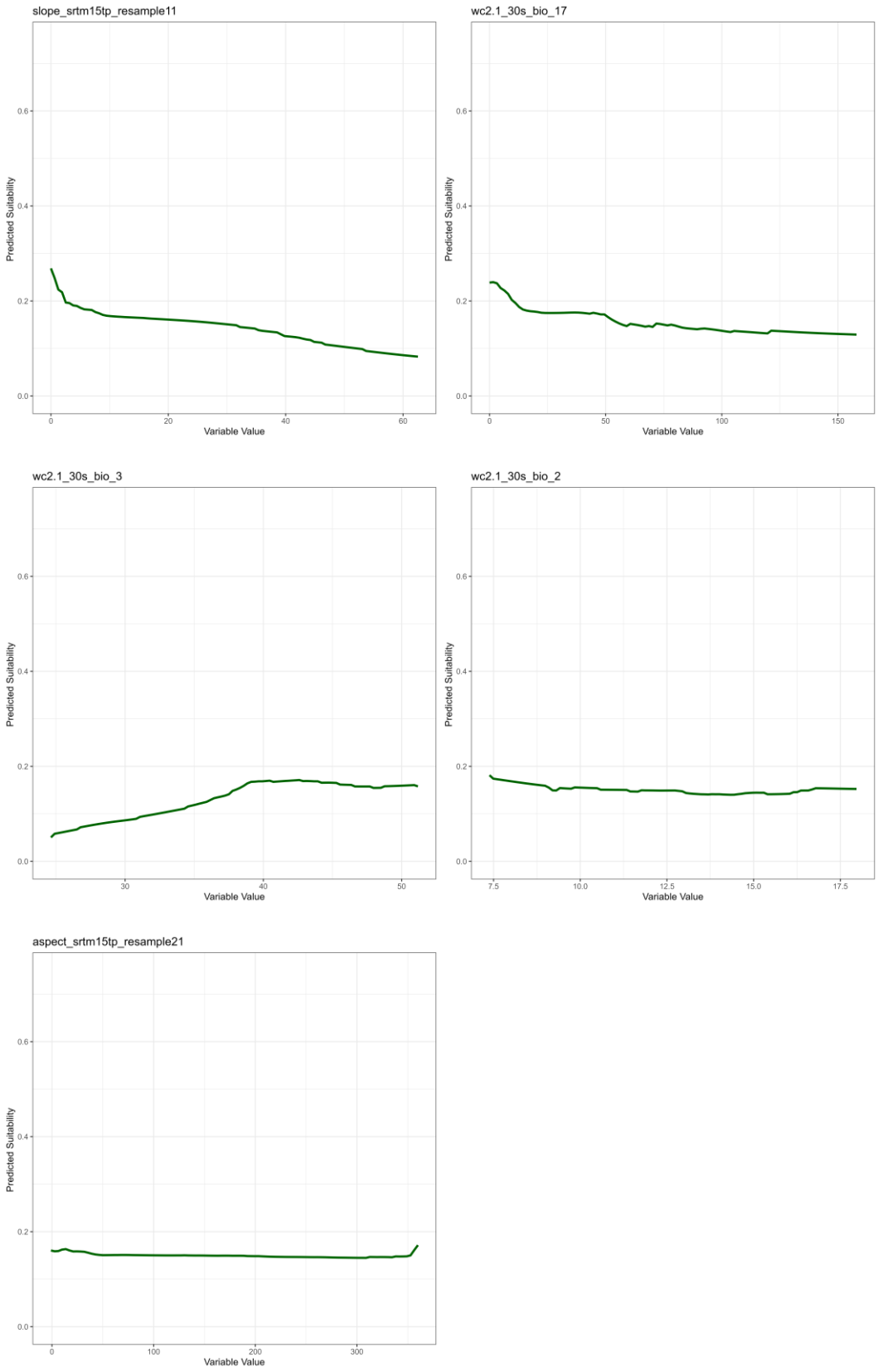
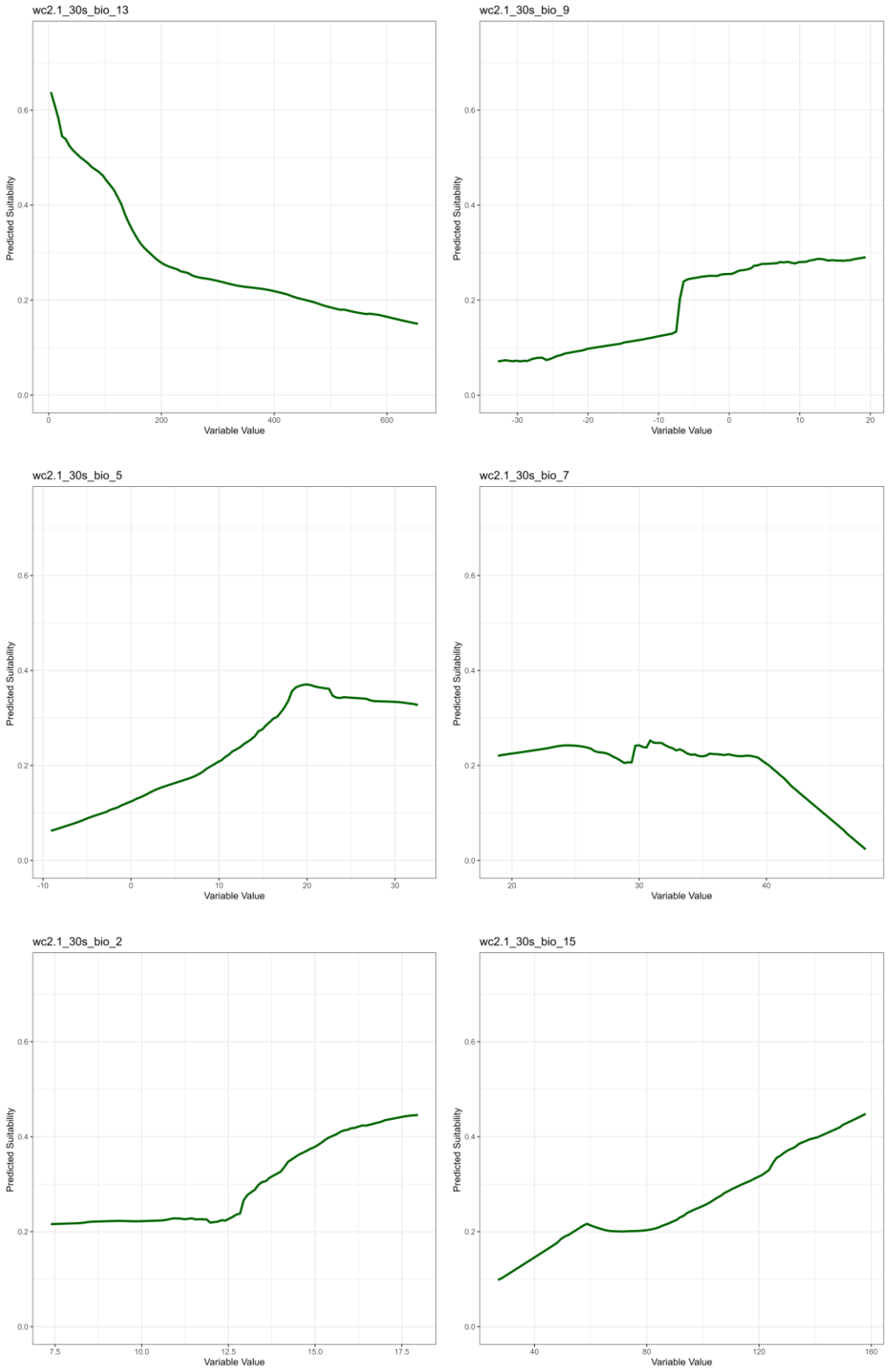
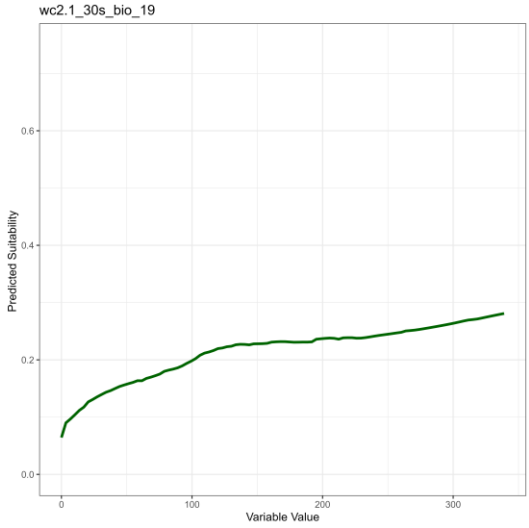


Figure S2. Response curves of the environmental variables of traditional SDMs in *Phrynocephalus erythrurus*. We divided them into three categories according to the contribution rate to the model, (a): variables of model contribution > 10 %; (b): variables of model contribution ≥ 5 %; (c): variables of model contribution < 5 %.

(a) Model contribution > 10 %



(b) Model contribution ≥ 5 %



(c) Model contribution < 5 %

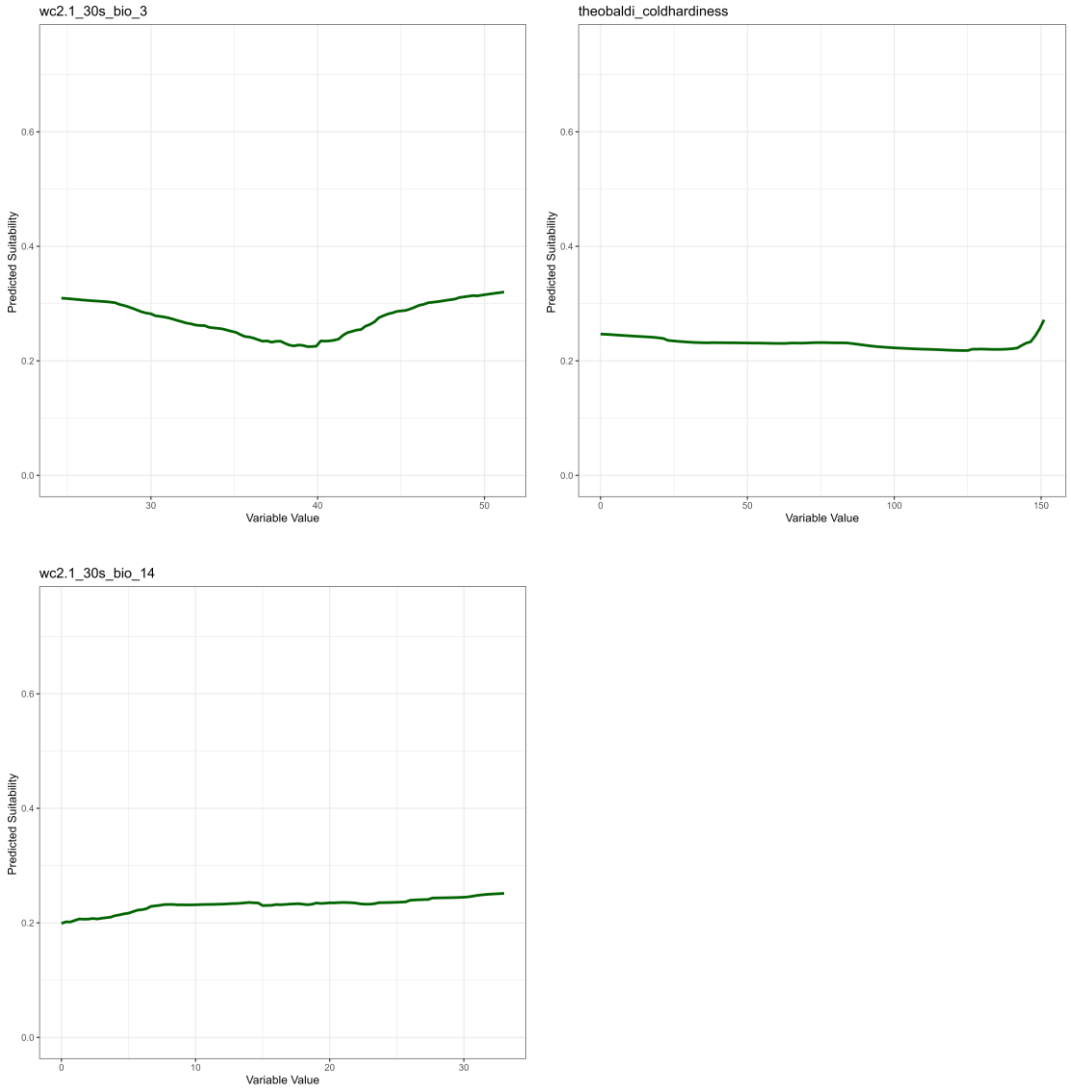
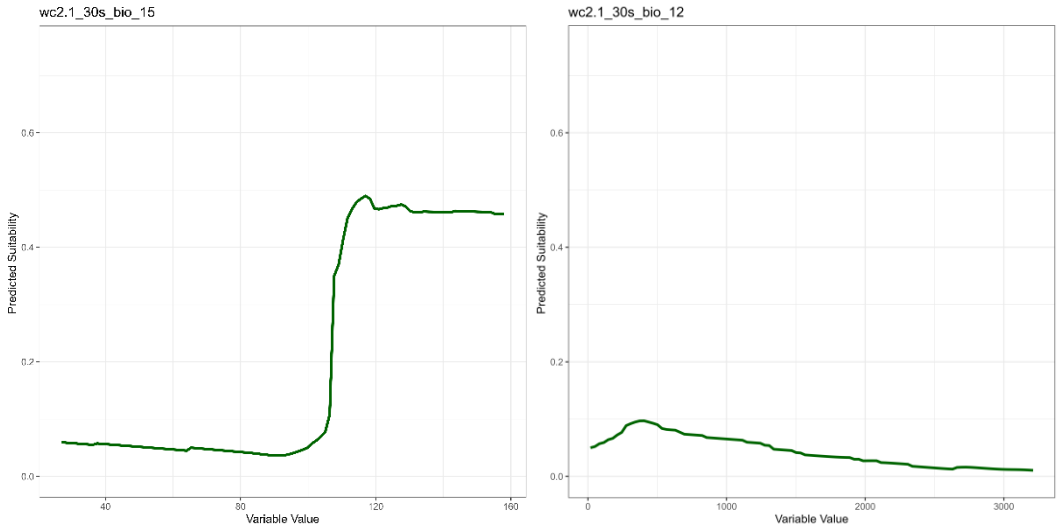


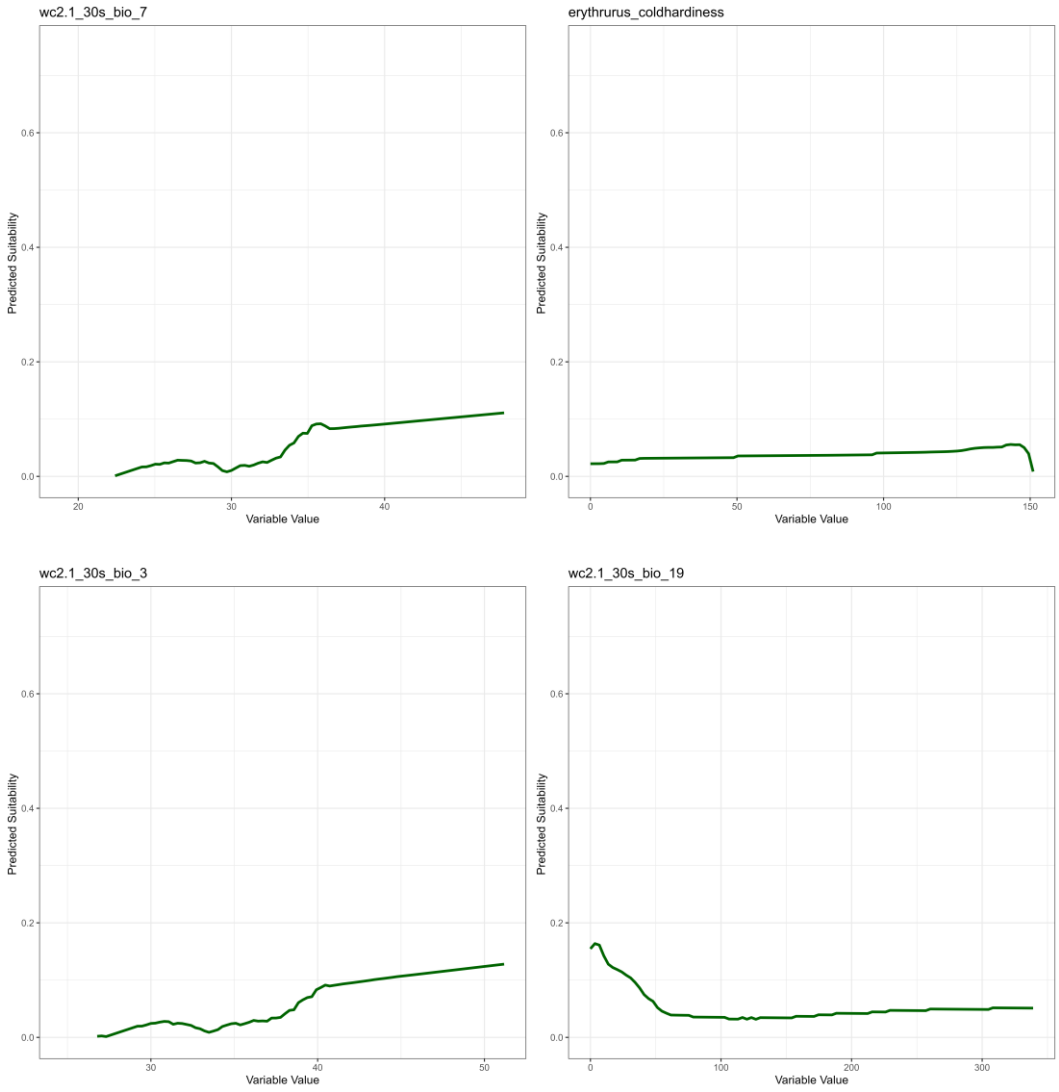
Figure S3. Response curves of the environmental variables of SDMs incorporating CT_{min} data in *Phrynocephalus theobaldi*. We divided them into three categories according to the contribution rate to the

model, (a): variables of model contribution > 10 %; (b): variables of model contribution ≥ 5 %; (c): variables of model contribution < 5 %.

(a) Model contribution > 10 %



(b) Model contribution < 5 %



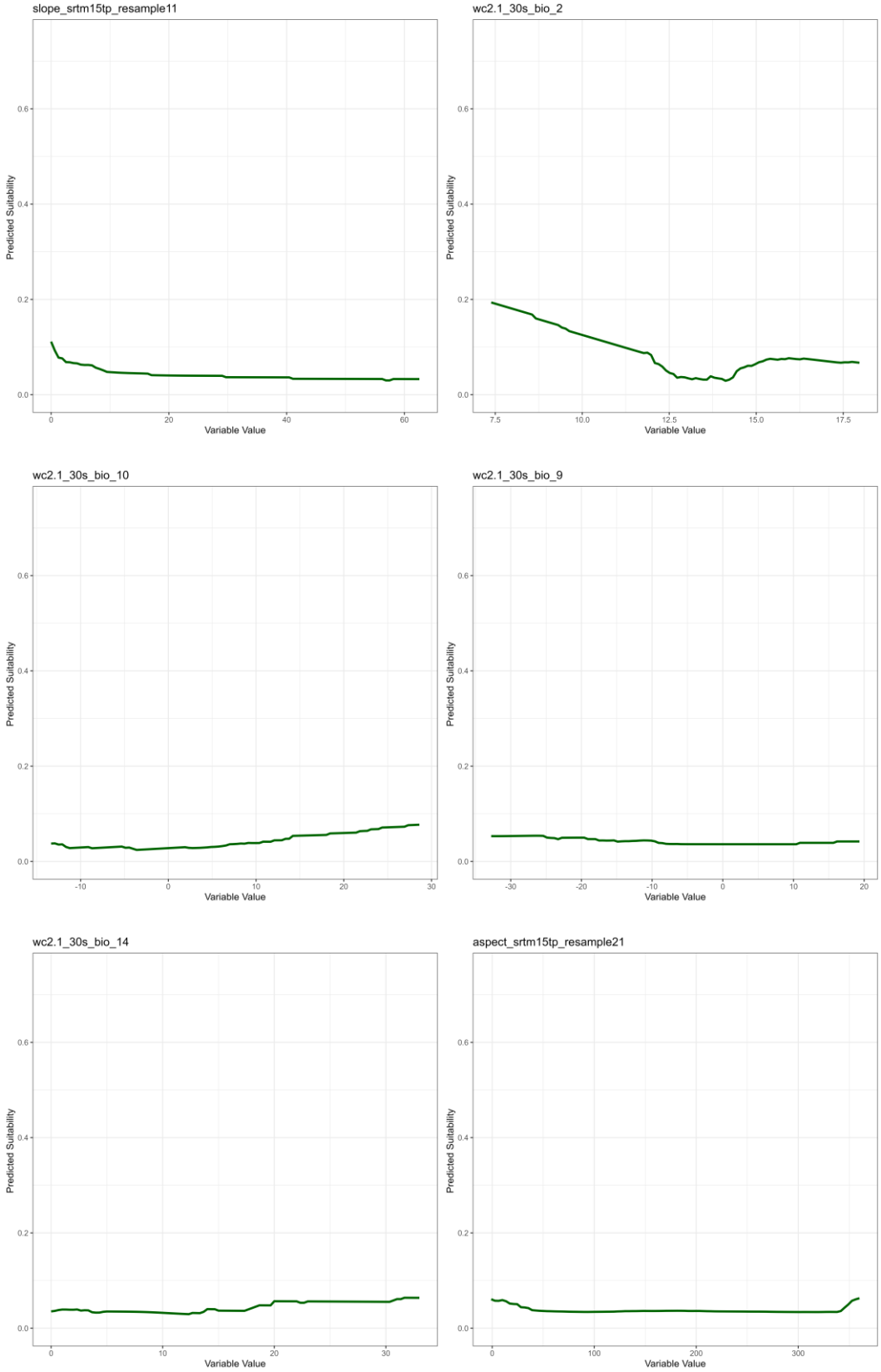


Figure S4. Response curves of the environmental variables of SDMs incorporating CT_{min} data in *Phrynocephalus erythrurus*. We divided them into three categories according to the contribution rate to the model, (a): variables of model contribution > 10 %; (b): variables of model contribution < 5 %.