

Table S1. The number of line transects per month for each year (2018 - 2021) during the survey.

Year	June	July	August	September	October	November
2018	4	4	5	4	3	3
2019	3	5	4	4	4	3
2020	4	5	4	3	4	3
2021	4	5	5	4	2	3

Table S2. Ranking of variables' importance affecting the distribution of Siberian ibex in Taxkorgan Nature Reserve.

Ranking	Variables	relative importance
1	Precipitation seasonality	0.30
2	Precipitation of wettest month	0.20
3	Human Influence Index	0.18
4	NDVI	0.15
5	Elevation	0.13
6	Temperature seasonality	0.11
7	Mean temperature of wettest quarter	0.08
8	Ruggedness	0.07
9	Mean temperature of driest quarter	0.02
10	Isothermality	0.02
11	Distance to water	0.01
12	Land cover	0.01
13	Precipitation of driest month	0.01
14	Slope	0.01
15	Aspect	0.01

Table S3. The evaluation of ensemble species distribution models (eSDMs, including AUC and TSS) of Siberian ibex in Taxkorgan Nature Reserve under current and different climate change scenarios. AUC and TSS have no units.

Period	Future scenarios	Model evaluation	
		AUC	TSS
Current	-	0.94	0.77
	RCP2.6	0.94	0.78
2050	RCP4.5	0.94	0.80
	RCP8.5	0.95	0.79
2070	RCP2.6	0.95	0.79
	RCP4.5	0.95	0.81
	RCP8.5	0.95	0.79

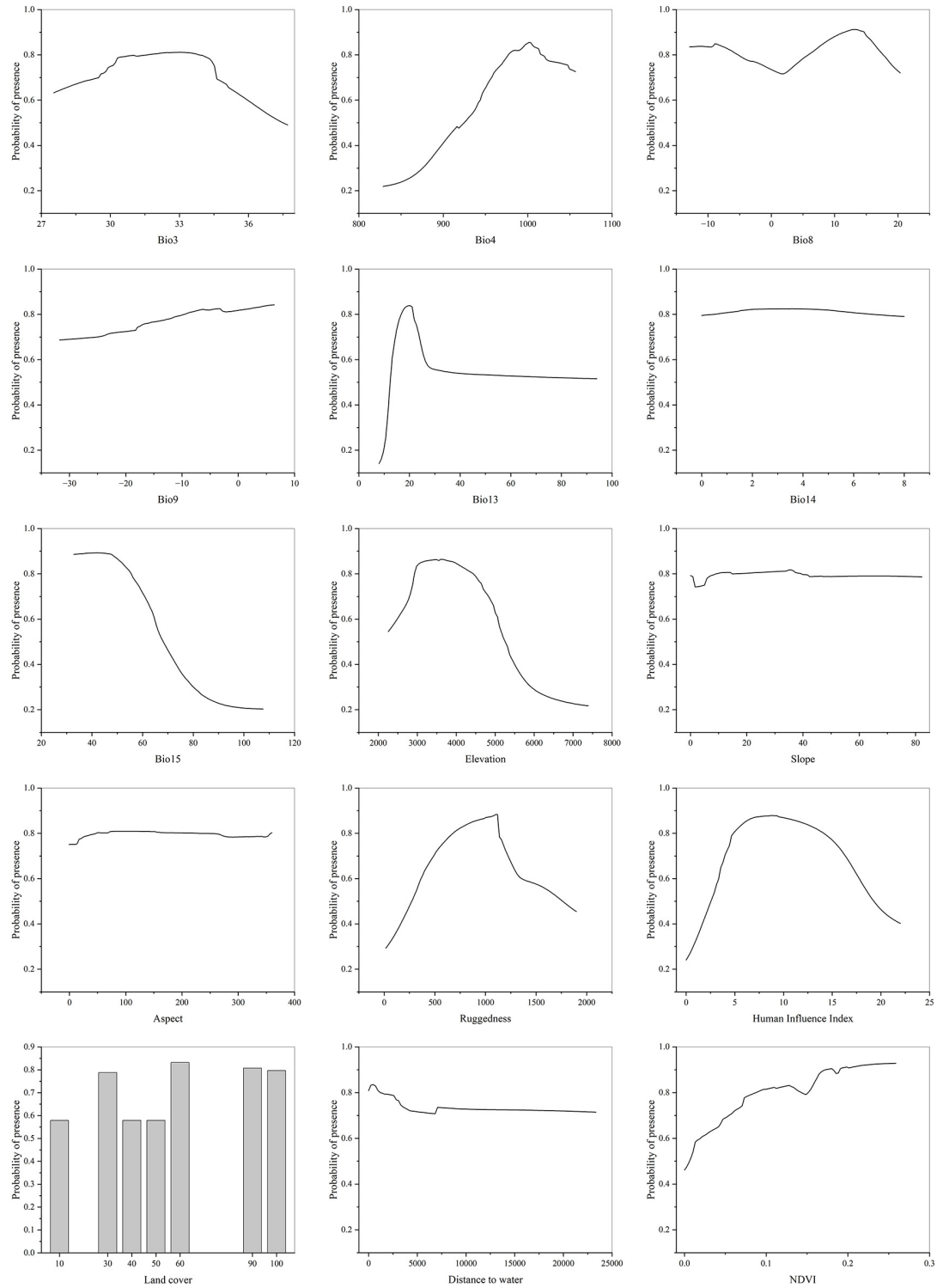


Figure S1. Response curves of the current ensemble species distribution models for Siberian ibex in Taxkorgan Nature Reserve to each variable. Y-axis represents the probability of presence of prediction.

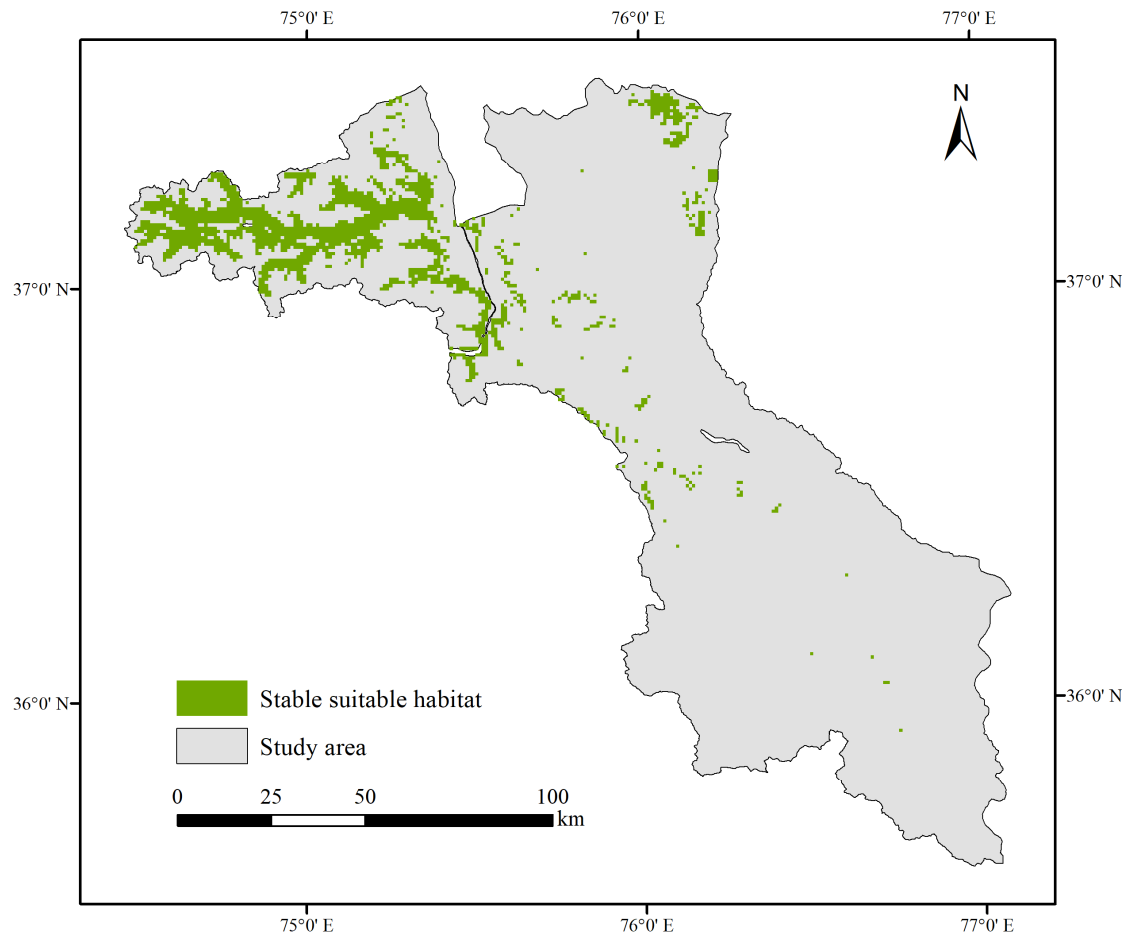


Figure S2. Stable suitable habitat for Siberian ibex in Taxkorgan Nature Reserve under climate change.