

Supplementary Table S1: Analysis of correlation coefficient of the environmental variables

Layer	bio2	bio4	bio6	bio7	bio8	bio9	bio10	bio11	bio13	bio15	bio16	bio17	bio18	bio19	slope
bio2	1														
bio4	0.128	1													
bio6	0.711 **	-0.518 **	1												
bio7	0.512 **	0.896 **	-0.176	1											
bio8	0.206	-0.061	0.126	0.053	1										
bio9	0.959 **	0.028	0.819 **	0.389 **	0.153	1									
bio10	0.926 **	-0.045	0.870 **	0.328 *	0.127	0.971 **	1								
bio11	0.830 **	-0.350 **	0.977 **	0.028	0.150	0.906 **	0.951 **	1							
bio13	-0.479 **	-0.313 *	-0.100	-0.382 **	-0.225	-0.427 **	-0.262 *	-0.166	1						
bio15	0.547 **	0.242	0.237	0.449 **	0.595 **	0.438 **	0.443 **	0.344 **	-0.212	1					
bio16	-0.647 **	-0.425 **	-0.196	-0.549 **	-0.277 *	-0.587 **	-0.442 **	-0.299 *	0.935 **	-0.477 **	1				
bio17	-0.846 **	-0.277 *	-0.463 **	-0.533 **	-0.353 **	-0.789 **	-0.692 **	-0.575 **	0.781 **	-0.671 **	0.916 **	1			
bio18	-0.905 **	-0.145	-0.672 **	-0.445 **	-0.077	-0.934 **	-0.852 **	-0.763 **	0.672 **	-0.296 *	0.754 **	0.840 **	1		
bio19	-0.717 **	-0.276 *	-0.371 **	-0.513 **	-0.453 **	-0.631 **	-0.612 **	-0.496 **	0.472 **	-0.843 **	0.693 **	0.826 **	0.585 **	1	
slope	-0.240	0.129	-0.373 **	-0.037	-0.206	-0.273 *	-0.375 **	-0.388 **	-0.105	-0.238	-0.035	0.123	0.188	0.209	1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The above table is the correlation coefficient among the explanatory variables. The environmental variables that have correlation coefficient of 0.70. This is the simple rule to detect the multicollinearity among the explanatory variables.

Supplementary Table S2. Snow leopard presence points obtained from the study area

S.No.	Species	Latitude	Longitude	Camera trapping Station
1	Panthera Uncia	36.52835	74.58094	
2	Panthera Uncia	36.52693	74.58315	
3	Panthera Uncia	36.52693	74.58315	
4	Panthera Uncia	36.52693	74.58315	
5	Panthera Uncia	36.51511	75.02349	
6	Panthera Uncia	36.51511	75.02349	
7	Panthera Uncia	36.51608	75.02131	
8	Panthera Uncia	36.52302	75.02203	Camera trapping of Snow leopard at this location
9	Panthera Uncia	36.52635	75.02161	
10	Panthera Uncia	36.51698	75.04869	Camera trapping of Snow leopard at this location
11	Panthera Uncia	36.51622	75.05169	
12	Panthera Uncia	36.52874	75.10014	
13	Panthera Uncia	36.52983	75.10103	
14	Panthera Uncia	36.53253	75.10299	
15	Panthera Uncia	36.52049	75.08081	
16	Panthera Uncia	36.52043	75.08085	
17	Panthera Uncia	36.52043	75.08085	
18	Panthera Uncia	36.52043	75.08085	
19	Panthera Uncia	36.43934	75.1998	
20	Panthera Uncia	36.43934	75.1998	
21	Panthera Uncia	36.43935	75.19975	
22	Panthera Uncia	36.43935	75.19975	
23	Panthera Uncia	36.43624	75.19845	
24	Panthera Uncia	36.43624	75.19845	
25	Panthera Uncia	36.5041	75.14225	
26	Panthera Uncia	36.5041	75.14225	
27	Panthera Uncia	36.49834	75.17453	
28	Panthera Uncia	36.49834	75.17453	
29	Panthera Uncia	36.51131	75.11944	
30	Panthera Uncia	36.51096	75.12163	
31	Panthera Uncia	36.51141	75.12003	
32	Panthera Uncia	36.51141	75.12003	
33	Panthera Uncia	36.53319	75.10566	

34	Panthera Uncia	36.53319	75.10566	
35	Panthera Uncia	36.53381	75.10622	
36	Panthera Uncia	36.52764	75.02114	Camera trapping of Snow leopard at this location
37	Panthera Uncia	36.51741	75.01823	
38	Panthera Uncia	36.51741	75.01823	
39	Panthera Uncia	36.52891	75.10035	
40	Panthera Uncia	36.53319	75.10566	
41	Panthera Uncia	36.50415	75.14492	
42	Panthera Uncia	36.52043	75.08086	
43	Panthera Uncia	36.52043	75.08086	
44	Panthera Uncia	36.52718	75.09902	
45	Panthera Uncia	36.52718	75.09902	
46	Panthera Uncia	36.50415	75.14492	
47	Panthera Uncia	36.2455	75.22906	
48	Panthera Uncia	36.2455	75.22906	
49	Panthera Uncia	36.23777	75.23256	
50	Panthera Uncia	36.22631	75.23032	
51	Panthera Uncia	36.22631	75.23032	
52	Panthera Uncia	36.22631	75.23032	
53	Panthera Uncia	36.22434	75.22904	
54	Panthera Uncia	36.22434	75.22904	
55	Panthera Uncia	36.22284	75.22794	
56	Panthera Uncia	36.22284	75.22794	
57	Panthera Uncia	36.21754	75.21497	
58	Panthera Uncia	36.2162	75.22444	
59	Panthera Uncia	36.22634	75.23519	
60	Panthera Uncia	36.22634	75.23519	
61	Panthera Uncia	36.22748	75.23751	
62	Panthera Uncia	36.22748	75.23751	
63	Panthera Uncia	36.22712	75.23806	
64	Panthera Uncia	36.22712	75.23806	
65	Panthera Uncia	36.25777	75.24087	
66	Panthera Uncia	36.2625	75.24148	
67	Panthera Uncia	36.2625	75.24148	
68	Panthera Uncia	36.26426	75.24216	
69	Panthera Uncia	36.26912	75.24251	
70	Panthera Uncia	36.26875	75.24656	
71	Panthera Uncia	36.27321	75.26098	
72	Panthera Uncia	36.27321	75.26098	
73	Panthera Uncia	36.28245	75.28762	
74	Panthera Uncia	36.28219	75.29662	

75	Panthera Uncia	36.28219	75.29662	
76	Panthera Uncia	36.28164	75.30106	
77	Panthera Uncia	36.28021	75.31972	
78	Panthera Uncia	36.27548	75.26407	
79	Panthera Uncia	36.26927	75.211	
80	Panthera Uncia	36.26927	75.211	
81	Panthera Uncia	36.27516	75.21244	
82	Panthera Uncia	36.27179	75.21108	
83	Panthera Uncia	36.26018	75.18954	
84	Panthera Uncia	36.29171	75.12423	
85	Panthera Uncia	36.29226	75.11894	