

Supplementary for

Susceptibility Modeling and Potential Risk Analysis of Thermokarst Hazard in Qinghai–Tibet Plateau Permafrost Landscapes Using a New Interpretable Ensemble Learning Method

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Table S1. Characteristics of different susceptibility classes based on the EXT model.

Classes	Area covered (%)	Thermokarst hazard covered (%)
Very Low	46.48	1.25
Low	26.61	2.89
Moderate	13.41	6.62
High	10.67	17.22
Very High	7.83	72.03

Table S2. Characteristics of different susceptibility classes based on the GBDT model.

Classes	Area covered (%)	Thermokarst hazard covered (%)
Very Low	52.97	1.70
Low	16.17	3.34
Moderate	11.10	7.23
High	9.46	15.37
Very High	10.30	72.37

Table S3. Characteristics of different susceptibility classes based on the XGBoost model.

Classes	Area covered (%)	Thermokarst hazard covered (%)
Very Low	59.73	2.10
Low	13.79	3.74
Moderate	8.78	6.49
High	8.13	14.53
Very High	9.57	73.14