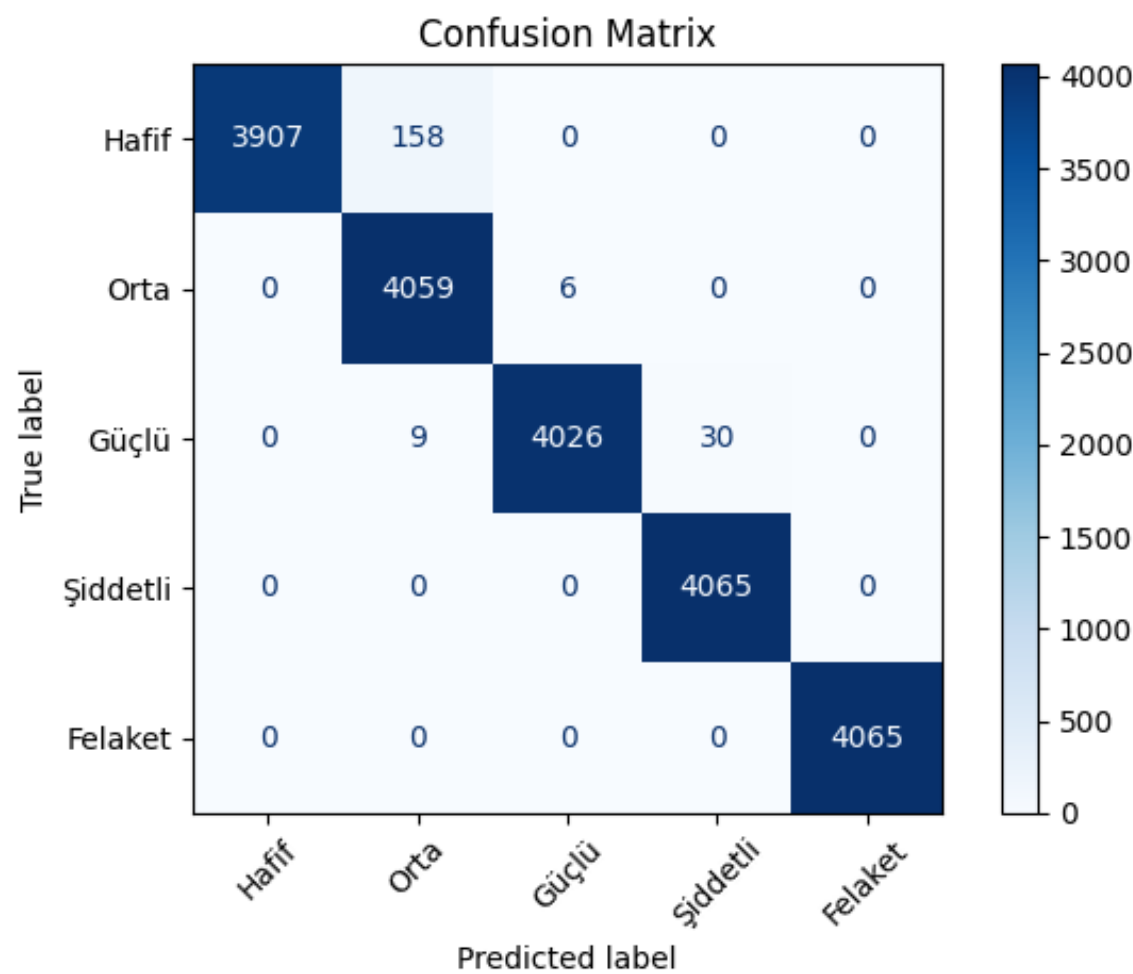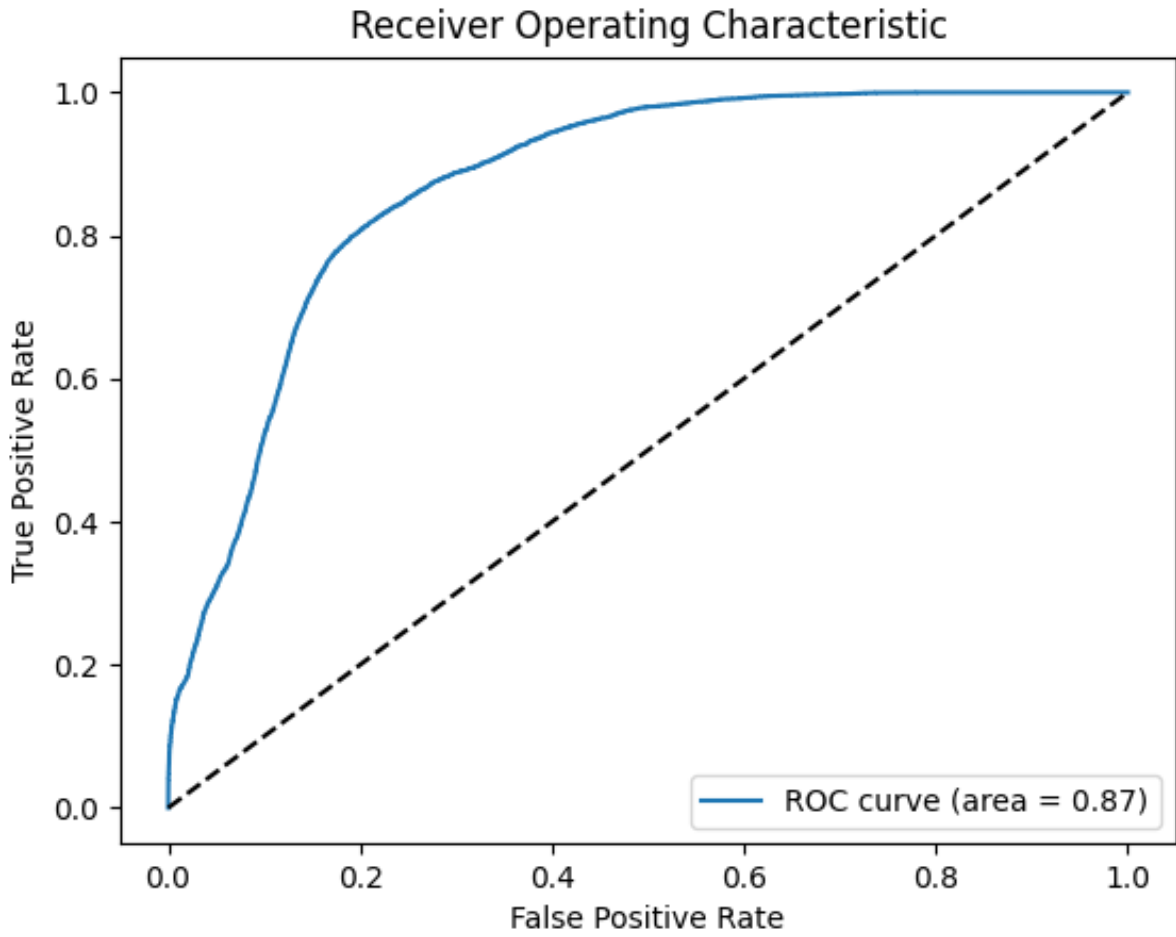# Earthquake Risk Analysis Report

Confusion Matrix / ROC Curve:

Confusion Matrix

Receiver Operating Characteristic

Class Distribution:

Tehlike Sınıfı Dağılımı
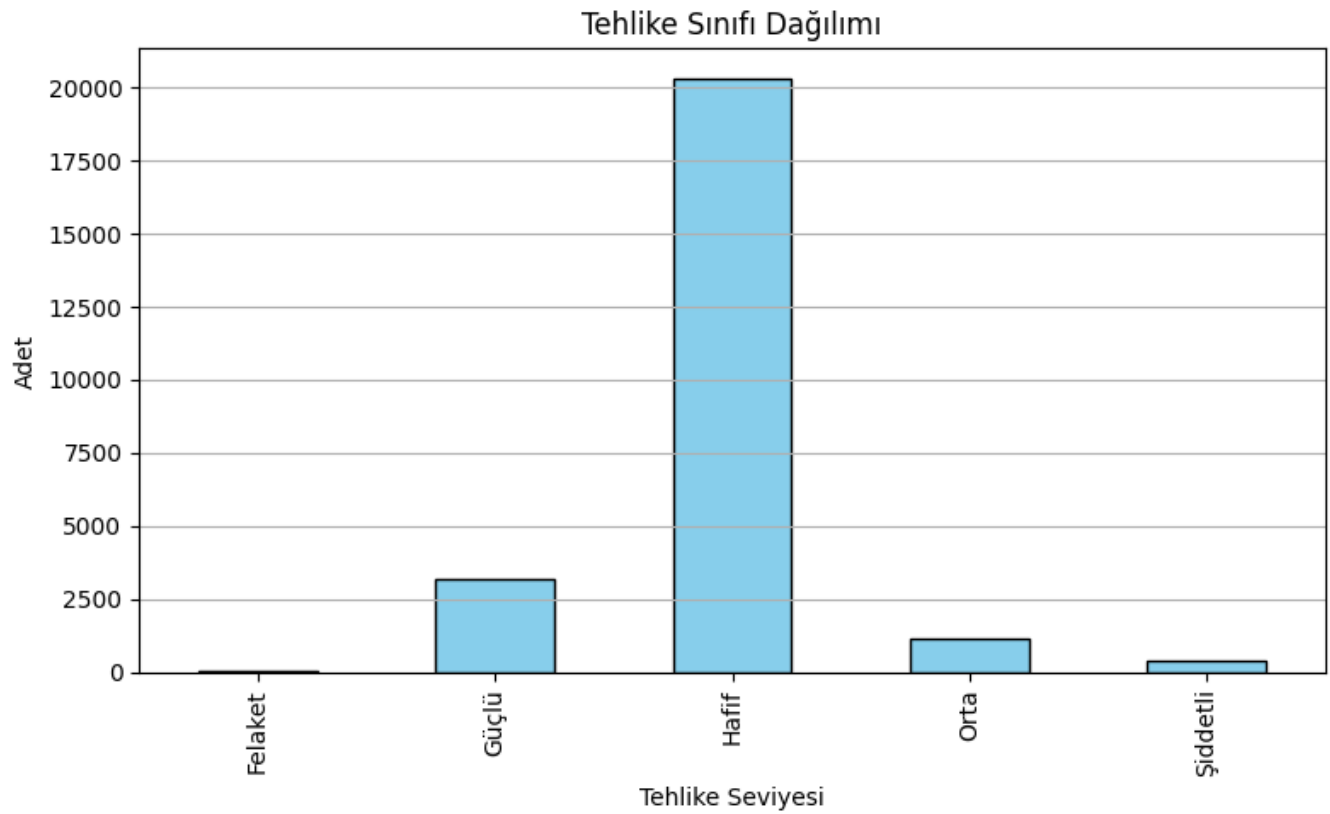
Regression Error Distribution:

Magnitude Prediction Error

Depth Prediction Error

Geographic Risk Map:
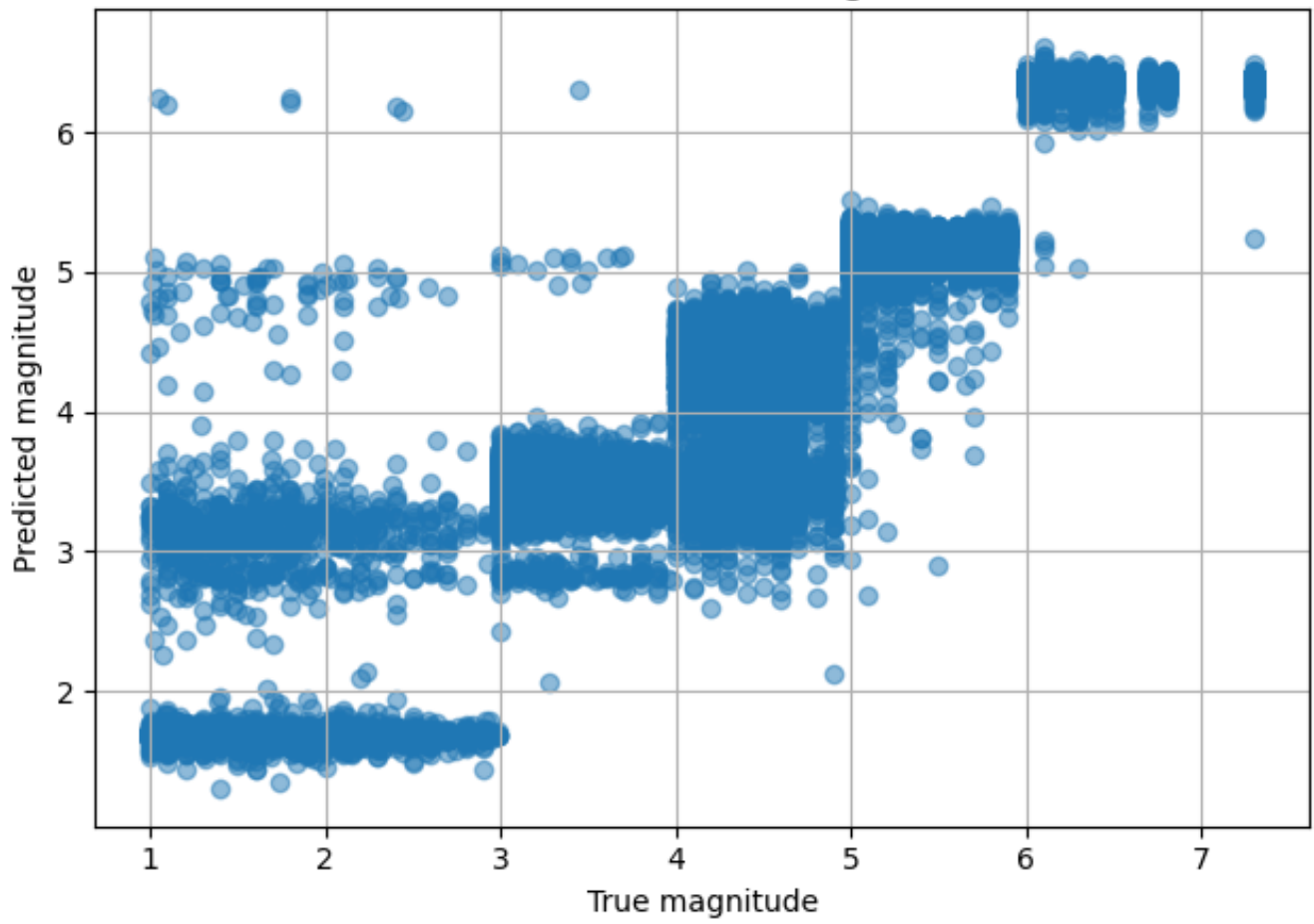

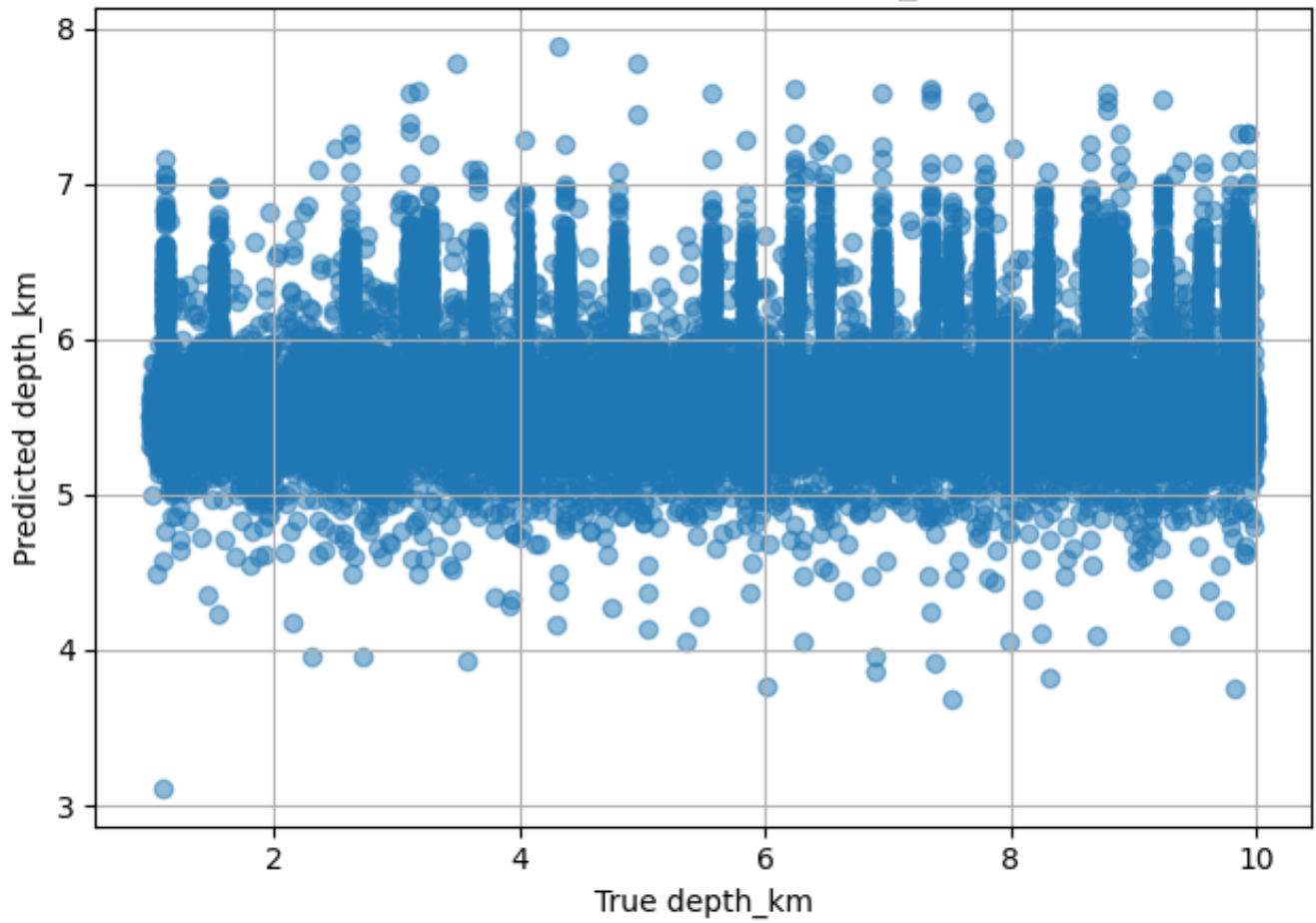Earthquake Geographic Distribution (Turkey)
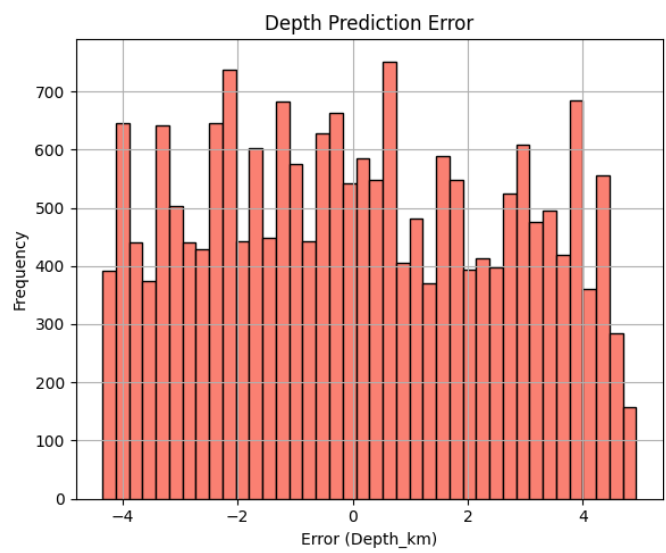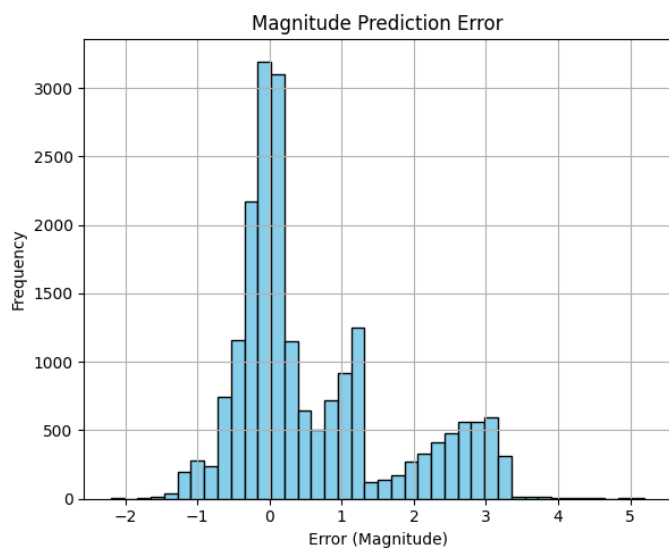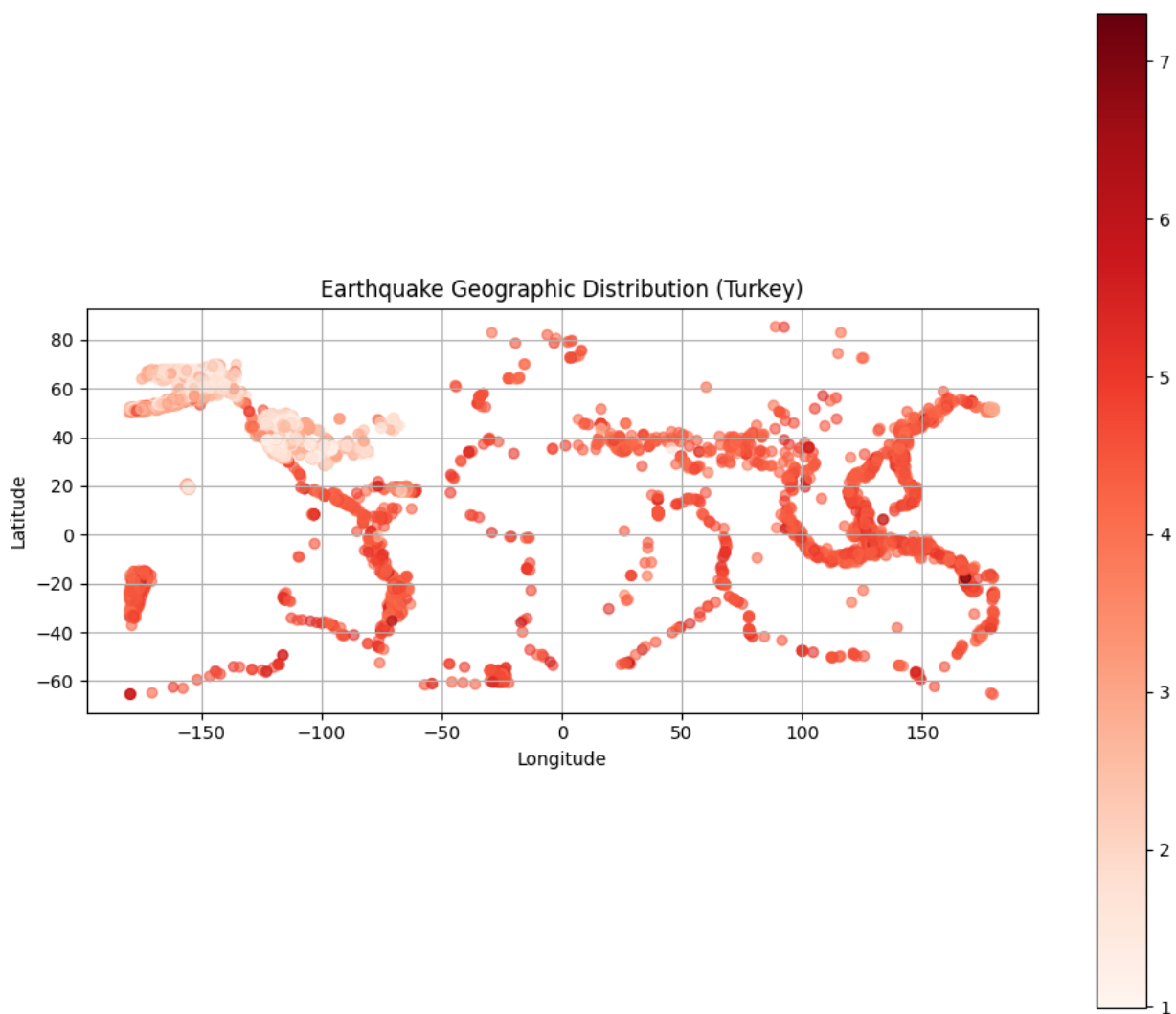
XGBoost Results:

XGBoost Prediction: magnitude

XGBoost Prediction: depth_km

Prediction Summary Statistics:

	feat_0	feat_1	feat_2	feat_3	feat_4	feat_5	feat_6	feat_7	feat_8	feat_9	feat_10	tr
count	20325.00	20325.00	20325.00	20325.00	20325.0	20325.00	20325.00	20325.00	20325.00	20325.00	20325.00	
mean	0.07	1.82	-0.91	1.02	0.0	0.04	0.01	-0.03	2.02	1.08	0.15	
std	0.98	1.45	1.38	1.52	0.0	0.93	0.93	0.96	10.73	1.49	1.42	
min	-1.73	-1.05	-4.45	-0.89	0.0	-1.52	-1.41	-0.76	-0.02	-1.00	-4.98	
25%	-0.77	0.86	-1.97	-0.42	0.0	-0.71	-0.71	-0.76	-0.02	0.08	-0.49	
50%	0.11	2.00	-0.82	0.48	0.0	0.03	0.00	-0.76	-0.01	0.71	-0.02	
75%	0.94	2.84	0.19	2.80	0.0	0.85	0.71	1.31	0.11	1.74	0.90	
max	1.73	4.59	1.86	3.46	0.0	1.58	1.41	1.31	90.28	7.68	3.93	

	feat_0	feat_1	feat_2	feat_3	feat_4	feat_5	feat_6	feat_7	feat_8	feat_9	feat_10
count	20325.00	20325.00	20325.00	20325.00	20325.0	20325.00	20325.00	20325.00	20325.00	20325.00	20325.00
mean	0.07	1.82	-0.91	1.02	0.0	0.04	0.01	-0.03	2.02	1.08	0.15
std	0.98	1.45	1.38	1.52	0.0	0.93	0.93	0.96	10.73	1.49	1.42
min	-1.73	-1.05	-4.45	-0.89	0.0	-1.52	-1.41	-0.76	-0.02	-1.00	-4.98
25%	-0.77	0.86	-1.97	-0.42	0.0	-0.71	-0.71	-0.76	-0.02	0.08	-0.49
50%	0.11	2.00	-0.82	0.48	0.0	0.03	0.00	-0.76	-0.01	0.71	-0.02
75%	0.94	2.84	0.19	2.80	0.0	0.85	0.71	1.31	0.11	1.74	0.90
max	1.73	4.59	1.86	3.46	0.0	1.58	1.41	1.31	90.28	7.68	3.93