

SO₂ Model Karşılaştırma Tablosu

Model	Train MAE	Test MAE	Train RMSE	Test RMSE	MAPE (%)	Median AE	Train R ²	Test R ²	Max Error
XGBoost (Default)	0.41	0.6	0.58	0.9	20.92	0.41	0.8357	0.6038	6.7
XGBoost (Optimized)	0.54	0.64	0.78	0.95	22.58	0.45	0.7063	0.554	6.68
Random Forest (Default)	0.2	0.53	0.31	0.84	18.02	0.32	0.9536	0.6554	6.79
Random Forest (Optimized)	0.65	0.73	0.91	1.05	25.65	0.53	0.6011	0.4547	7.35
LightGBM (Default)	0.6	0.67	0.83	0.97	23.73	0.49	0.6659	0.5335	7.06
LightGBM (Optimized)	0.53	0.63	0.75	0.92	22.08	0.45	0.727	0.5805	6.67
CatBoost (Default)	0.5	0.61	0.72	0.9	21.42	0.44	0.7533	0.5985	6.64
CatBoost (Optimized)	0.5	0.61	0.72	0.9	21.19	0.44	0.7489	0.6055	6.41