

Tabela 4. Model Performance and Detected Anomalies by Accident Class Using Z-Scores Across Brazilian States

Attribute	Class	Model Slope	Model Performance (R2)	Mean Residual (MAE)	Model Anomalies	Model Anomalies Residuals	Model Anomalies Slopes
Accident_Cause	Health and Fatigue	0.926	0.791	0.144			
	Inattention and Distracted Driving	0.854	0.705	0.253			
	Mechanical Failures, Load and Maintenance	0.847	0.708	0.181			
	Substance Influence	1.171	0.603	0.283			
	Surface and Environmental Hazards	0.645	0.53	0.17			
	Unsafe Driving Practices and Disobedience	1.23	0.768	0.258			
Accident_Classification	With fatal victims	0.714	0.68	0.169			
	With injured victims	0.963	0.814	0.206			
	Without victims	0.796	0.614	0.255	AC	-1.046	-0.732
Accident_Type	Animal run over	0.444	0.17	0.213	SE	1.315	-12.838
	Collision with object	0.925	0.527	0.273			
	Head-on collision	0.989	0.699	0.197	SC	0.794	2.14
	Occupant falls from vehicle	0.662	0.473	0.241			
	Person run over	0.889	0.571	0.188			
	Rollover	0.732	0.453	0.263	AM	-1.134	2.402
	Run-off-road collision	0.904	0.799	0.181	PB	0.572	2.203
	Side collision	0.964	0.696	0.208	RN	1.171	38.359
	Transversal collision	1.174	0.811	0.236	PB	1.091	3.059
Day_Phase	Dawn	0.61	0.364	0.228	RR	-0.865	-0.752
	Full day	0.906	0.841	0.175	AM	-1.134	2.402
	Full night	0.84	0.797	0.206	ES	0.784	1.977
Weather_Condition	Clear sky	1.283	0.808	0.249			
	Cloudy	1.017	0.662	0.251	ES	1.044	2.889
	Rain	0.821	0.64	0.158	PB	1.091	3.059
	Sun	0.901	0.786	0.178			

Tabela 5. Model Performance and Detected Anomalies by Accident Class Using Local Moran Index Across Brazilian States

Attribute	Class	Model Slope	Model Performance (R2)	Mean Residual (MAE)	Model Anomalies	Model Anomalies Residuals	Model Anomalies Slopes
Accident_Cause	Health and Fatigue	0.824	0.59	0.216	ES	0.89	1.846
	Inattention and Distracted Driving	0.404	0.138	0.254			
	Mechanical Failures, Load and Maintenance	0.603	0.383	0.215	AP	1.292	-36.213
	Substance Influence	0.554	0.445	0.275			
	Surface and Environmental Hazards	0.385	0.092	0.358	RR	-1.755	-2.81
	Unsafe Driving Practices and Disobedience	0.875	0.349	0.221	RO, RR	-1.22, 1.246	2.454, -8.821
	With fatal victims	0.782	0.456	0.256	RR	-1.228	7.644
	With injured victims	0.968	0.469	0.173	RO	-1.032	3.837
	Without victims	0.334	0.277	0.261	RO	-1.117	5.65
Accident_Type	Animal run over	0.195	-0.065	0.296	SE	2.131	-8.767
	Collision with object	0.511	0.488	0.234			
	Head-on collision	0.376	0.174	0.201			
	Occupant falls from vehicle	-0.046	-0.08	0.294	AC, RO	1.942, 2.152	-11.048, -46.93
	Person run over	0.185	-0.07	0.364	AP	-1.48	-0.467
	Rollover	0.427	0.118	0.267	RR	1.385	5.737
	Run-off-road collision	0.76	0.558	0.225	PB	-1.043	2.065
	Side collision	0.939	0.591	0.186	RO	-0.822	2.286
	Transversal collision	0.592	0.718	0.153	DF	0.729	2.614
Day_Phase	Dawn	-0.201	0.051	0.27	RO	-1.92	1.487
	Full day	0.926	0.752	0.155			
	Full night	0.706	0.647	0.157	SP	0.577	0.189
Weather_Condition	Clear sky	0.403	0.329	0.158	AM	-0.828	1.516
	Cloudy	0.167	-0.507	0.295			
	Rain	0.431	0.563	0.199			