

# Fraud Detection Report

Generated on: 2024-12-01

## Summary Statistics for Transaction Amounts:

count: 590540.00

mean: 135.03

min: 0.25

25%: 43.32

50%: 68.77

75%: 125.00

max: 31937.39

std: 239.16

0: 0.97

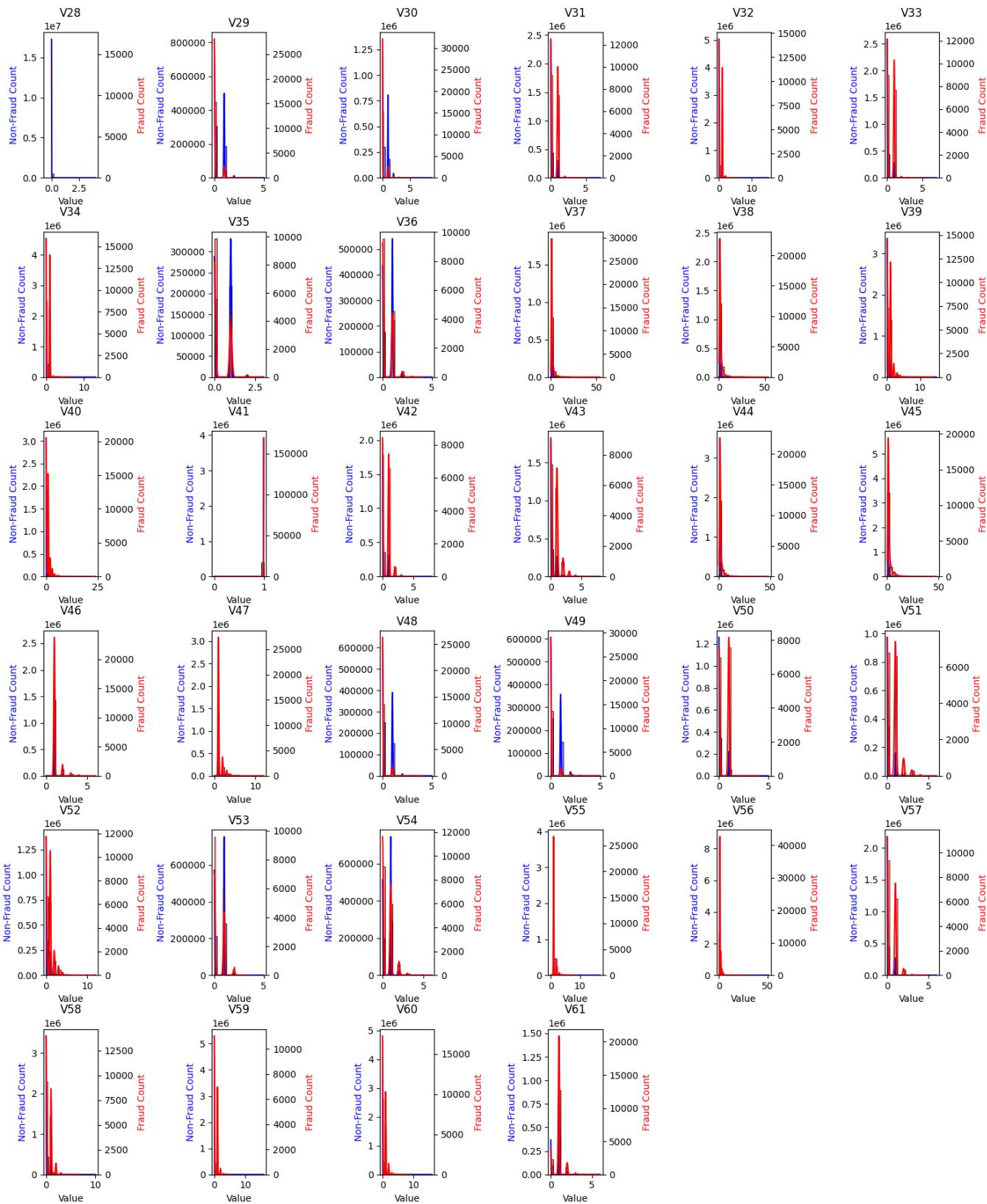
1: 0.03

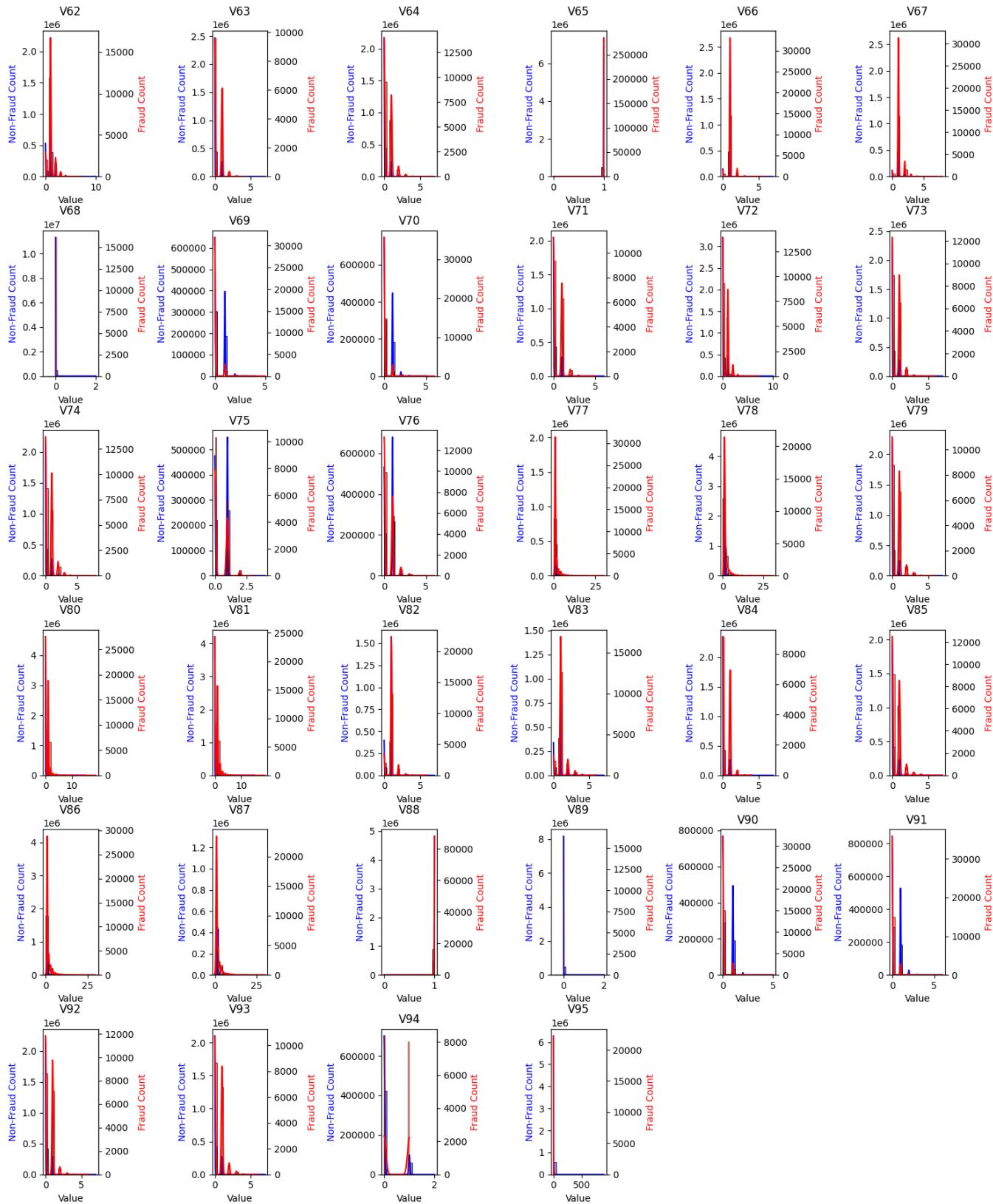
## Top 20 Features and their Importance:

Variables Histogram:



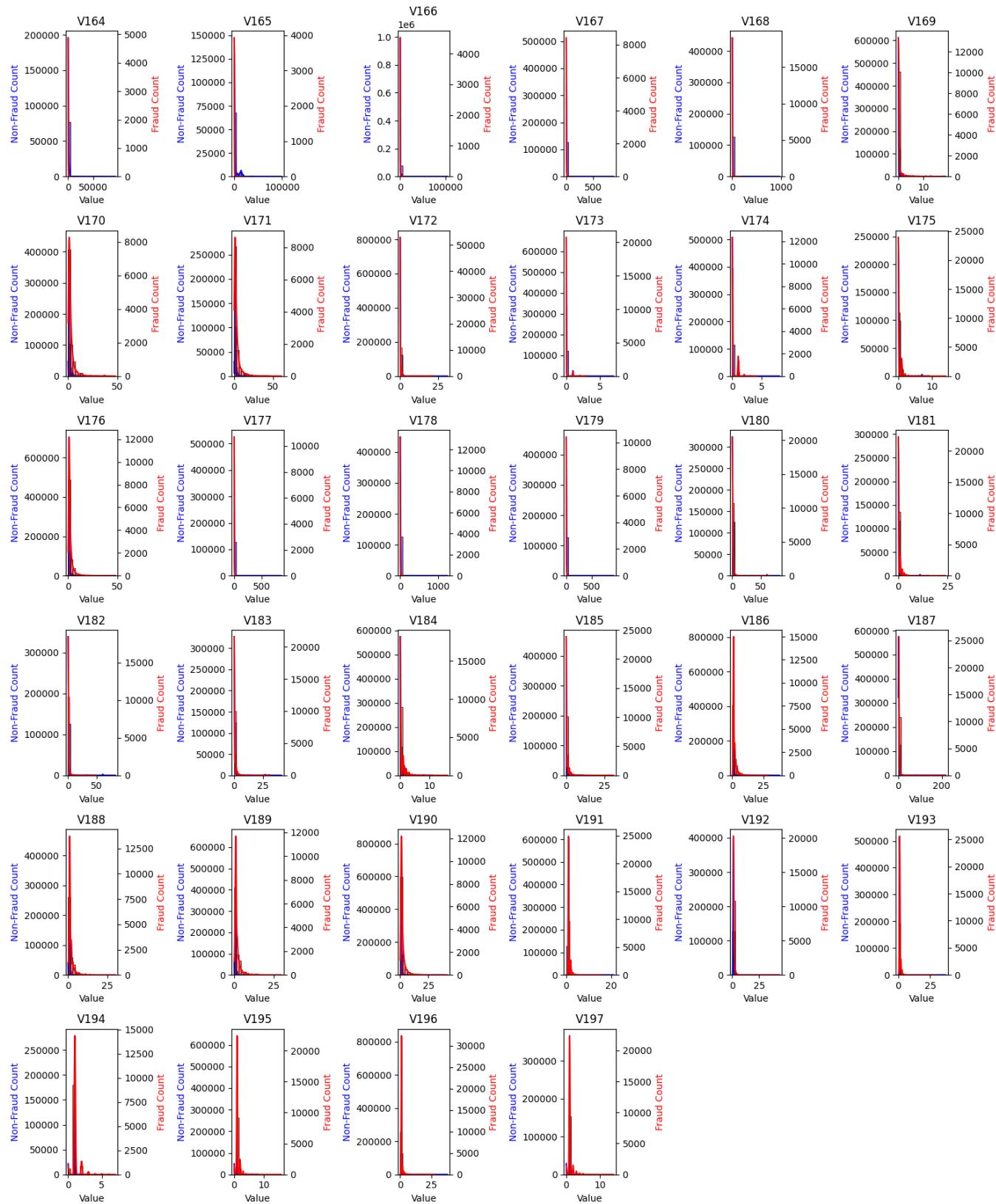


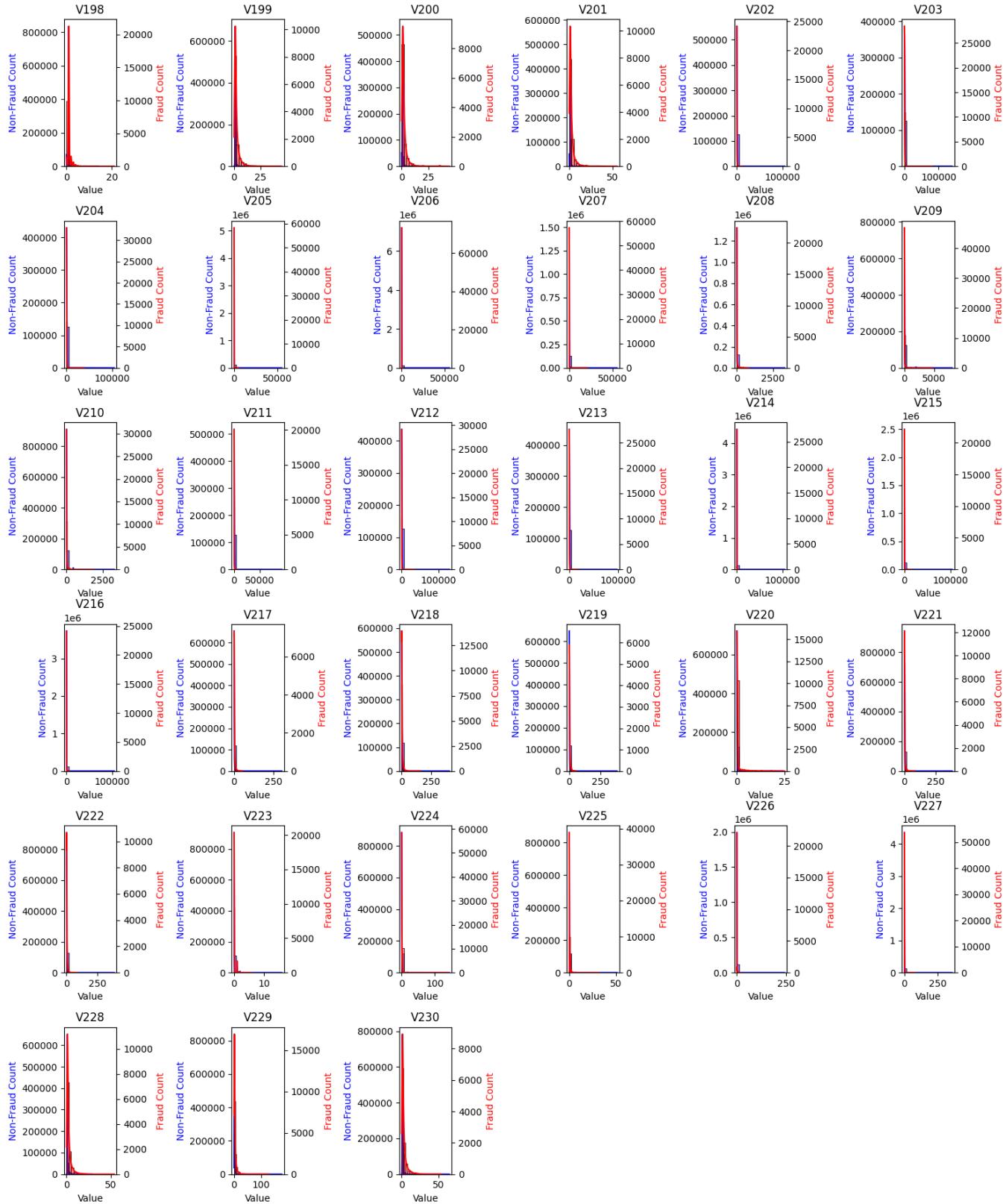




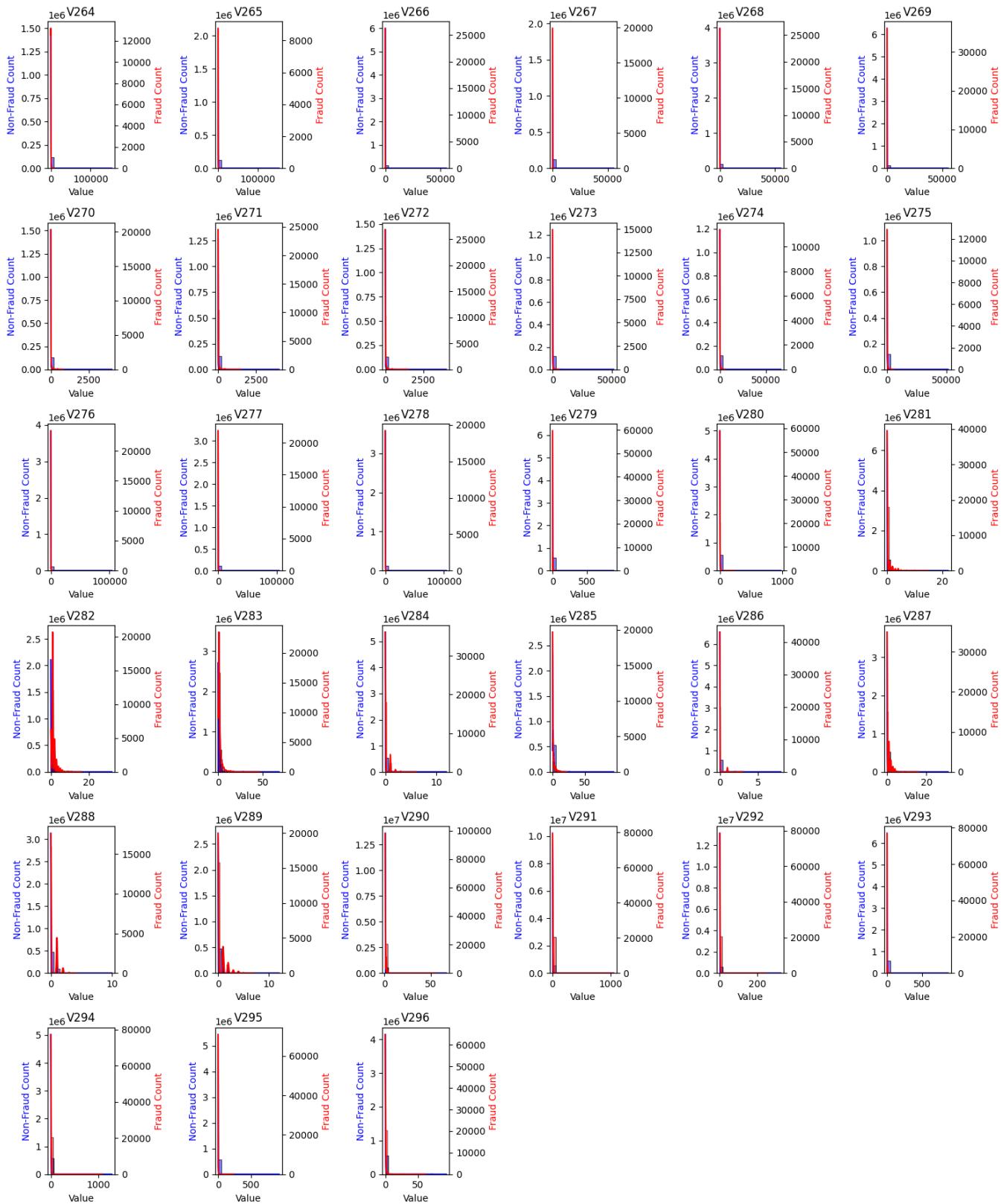




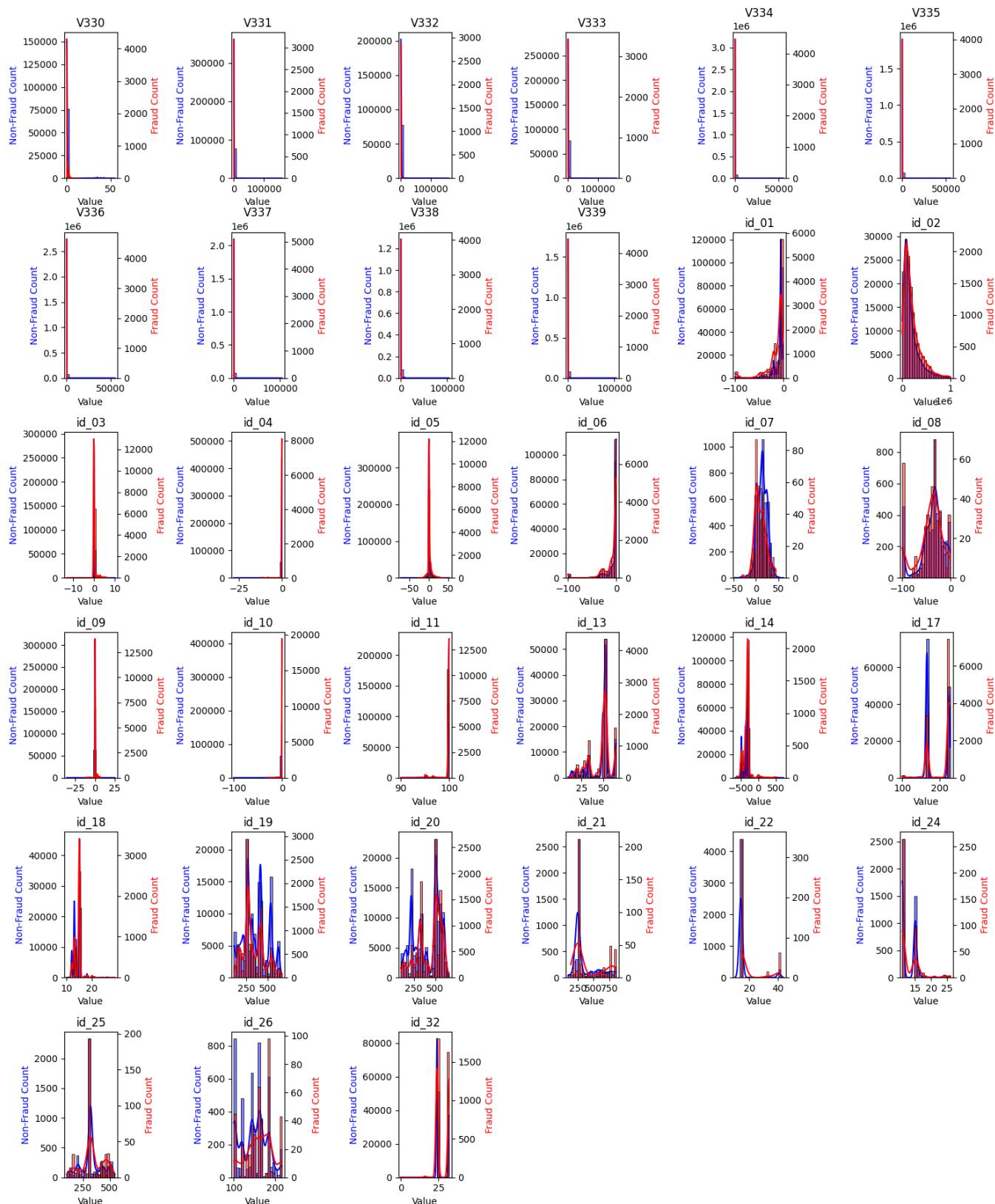




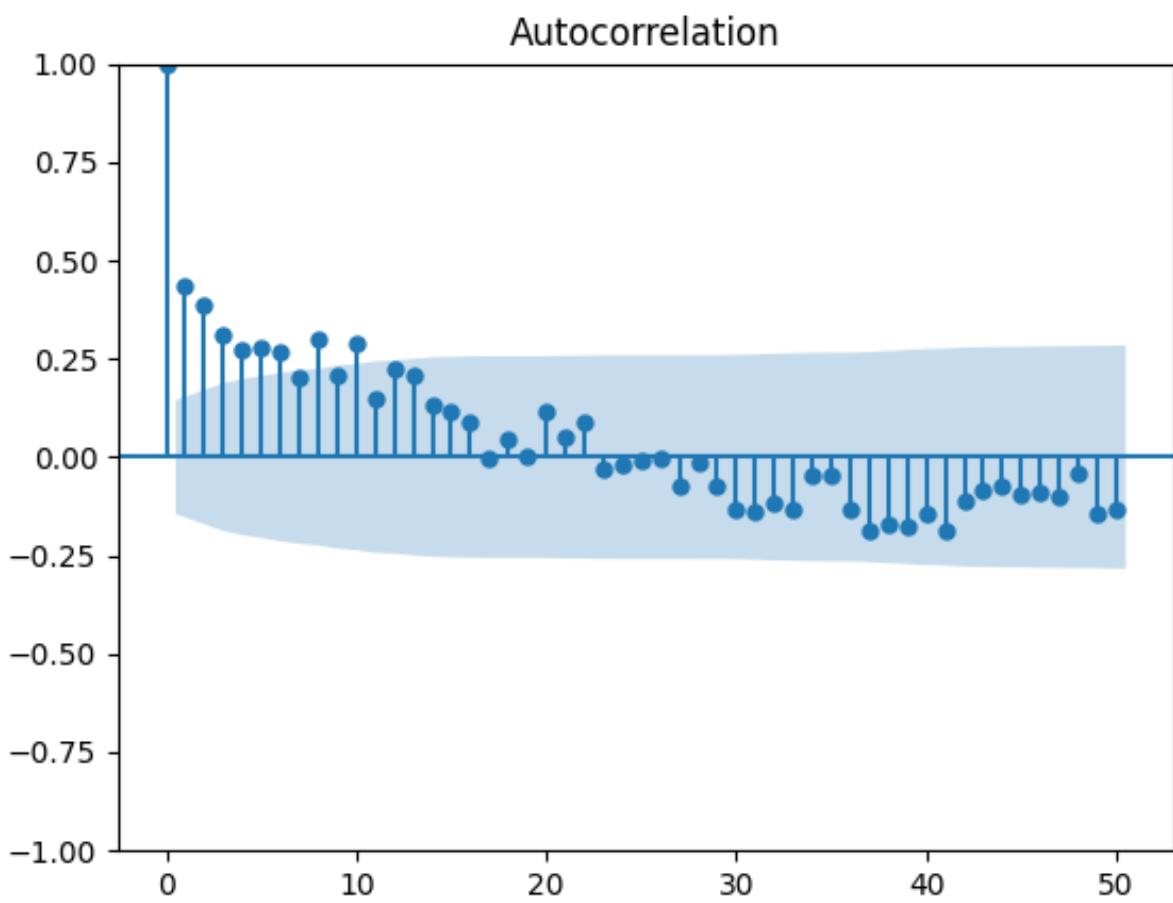




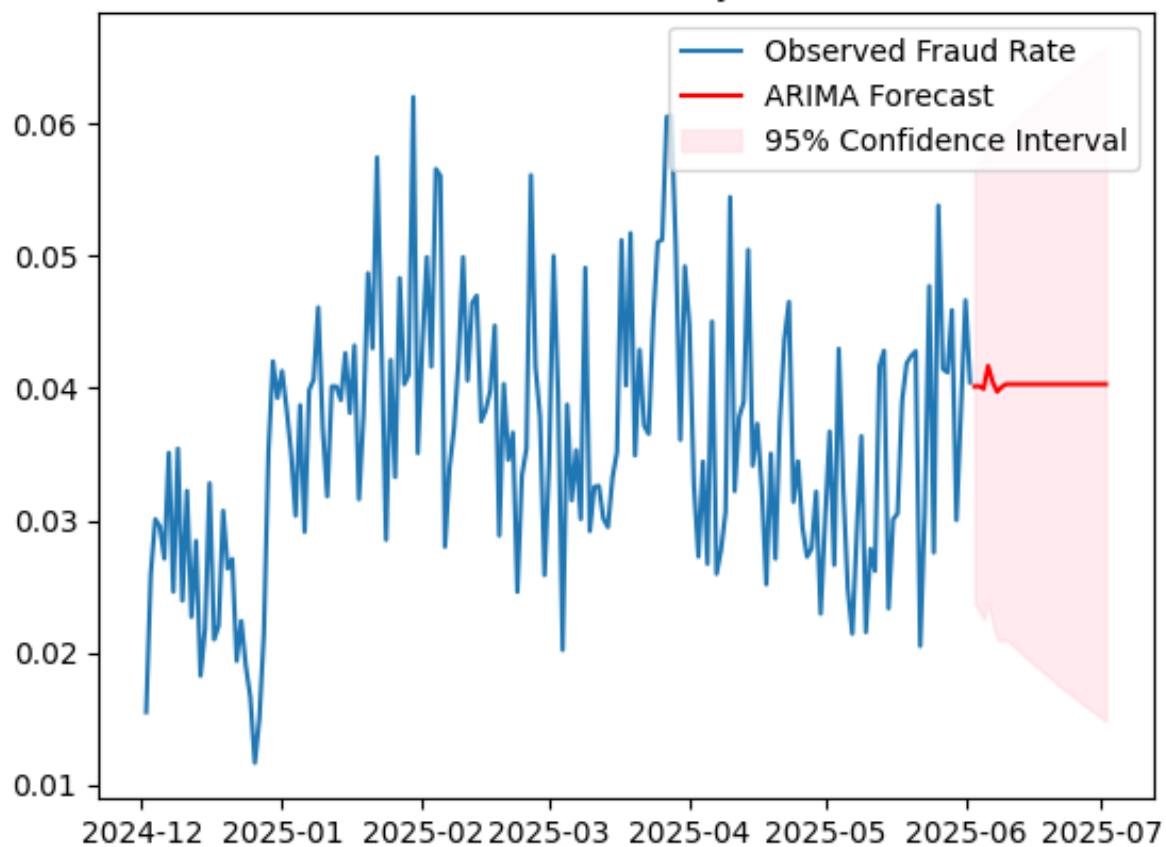




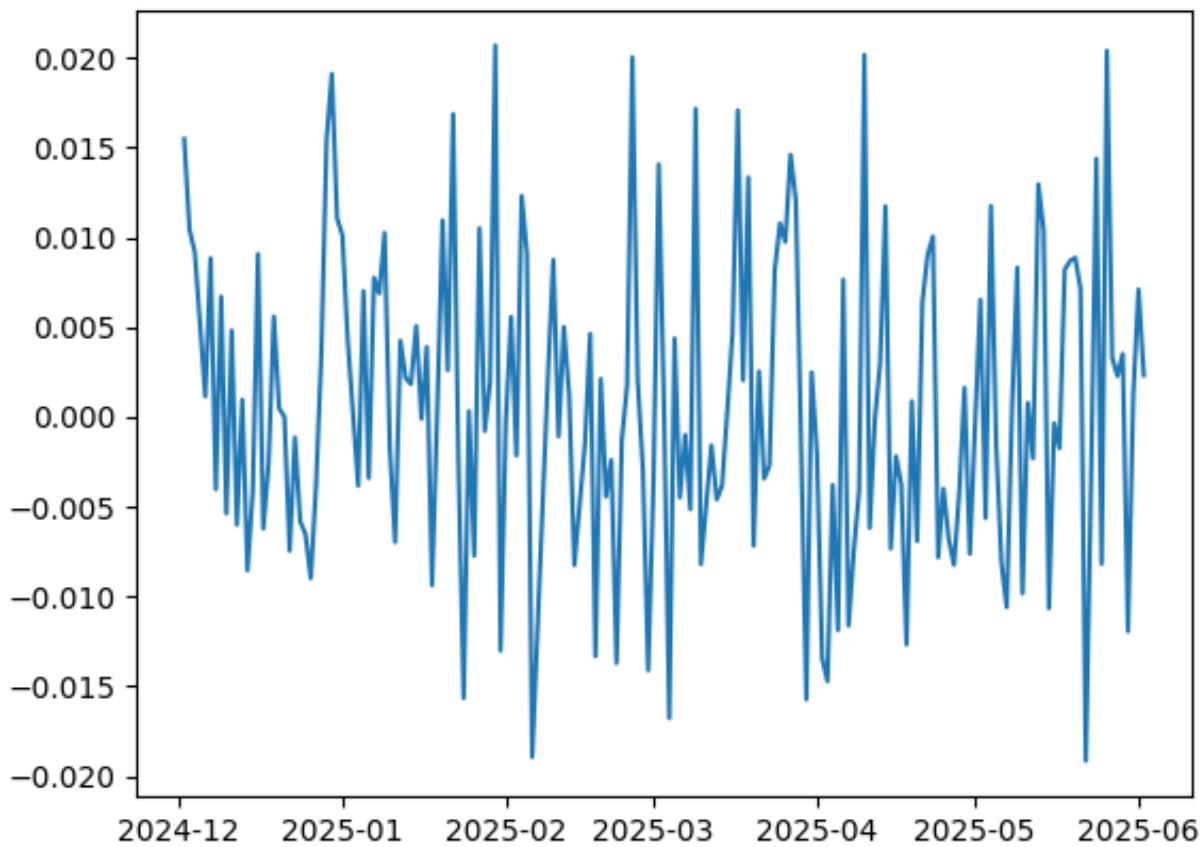
## Time Series Analysis:

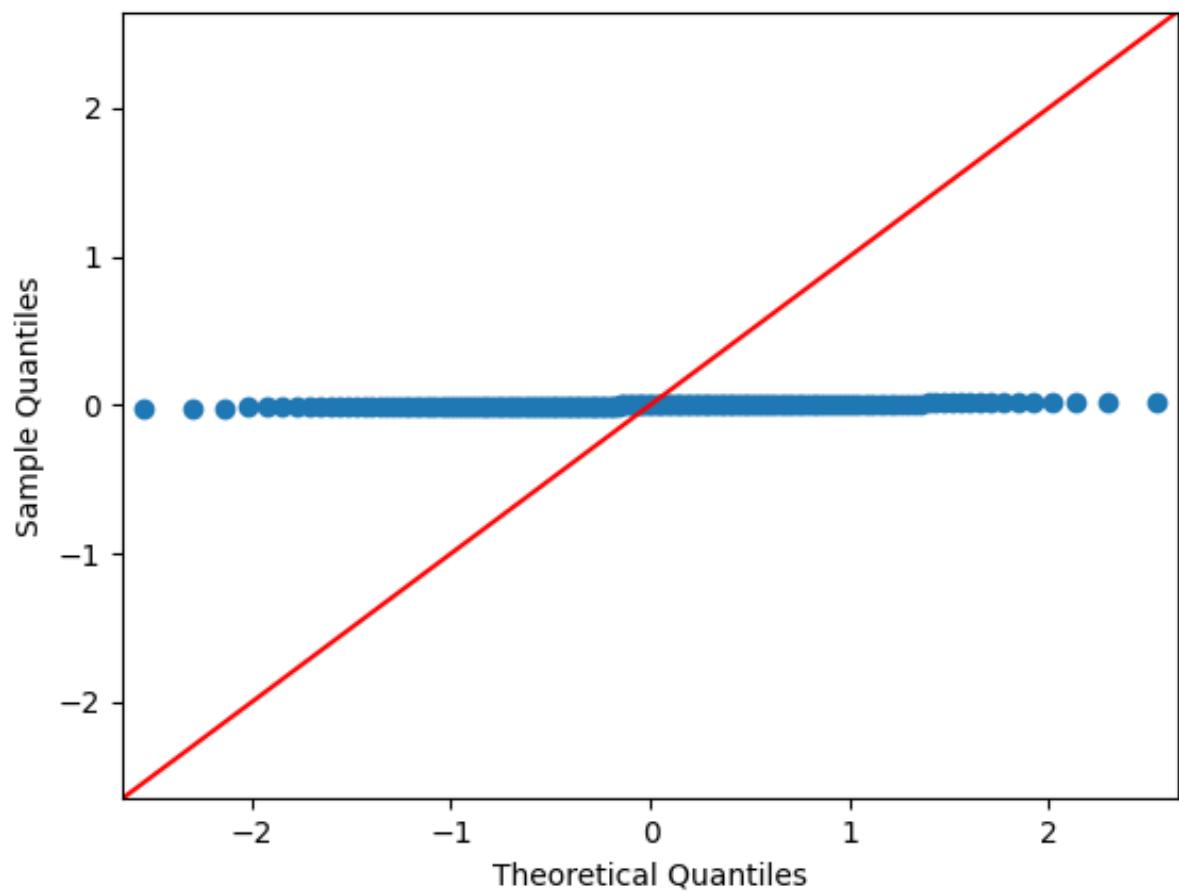


## ARIMA Forecast of Daily Fraud Rate

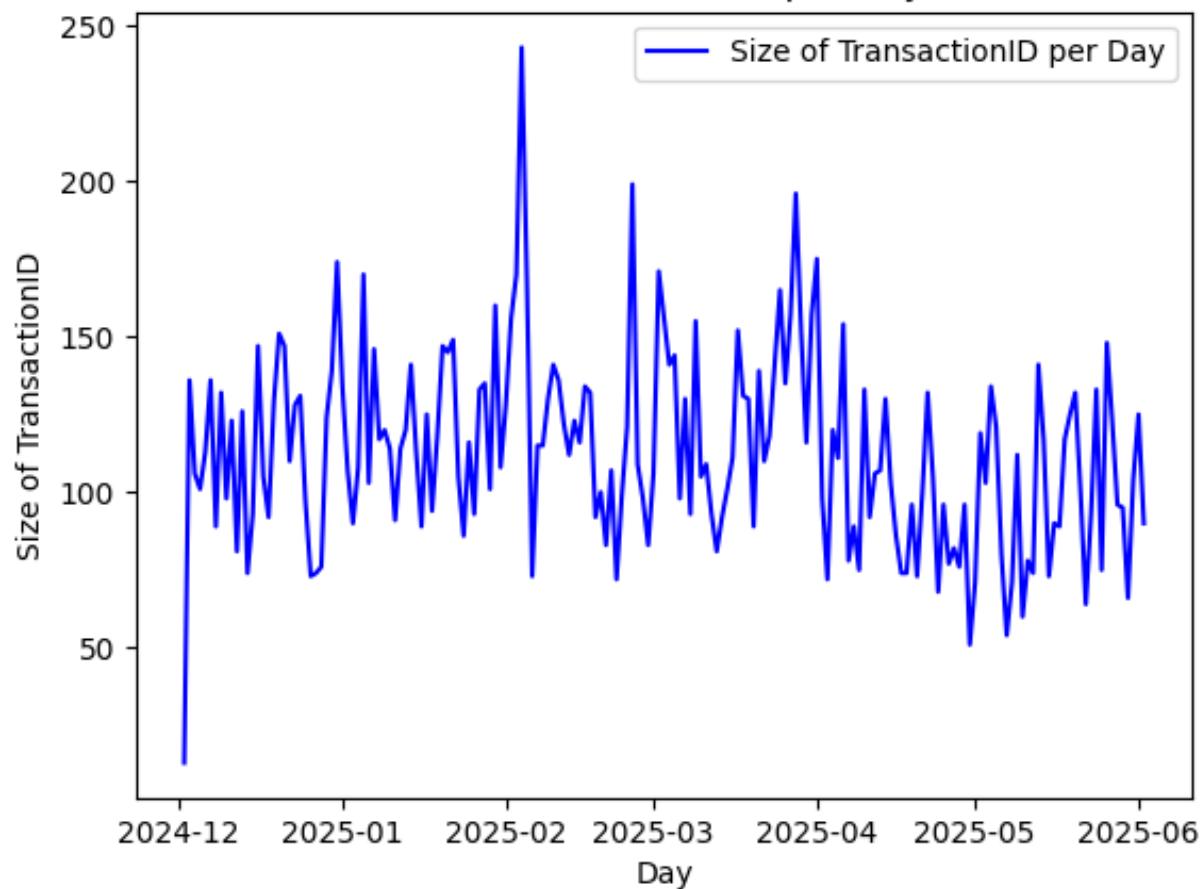


### Residuals of ARIMA Model

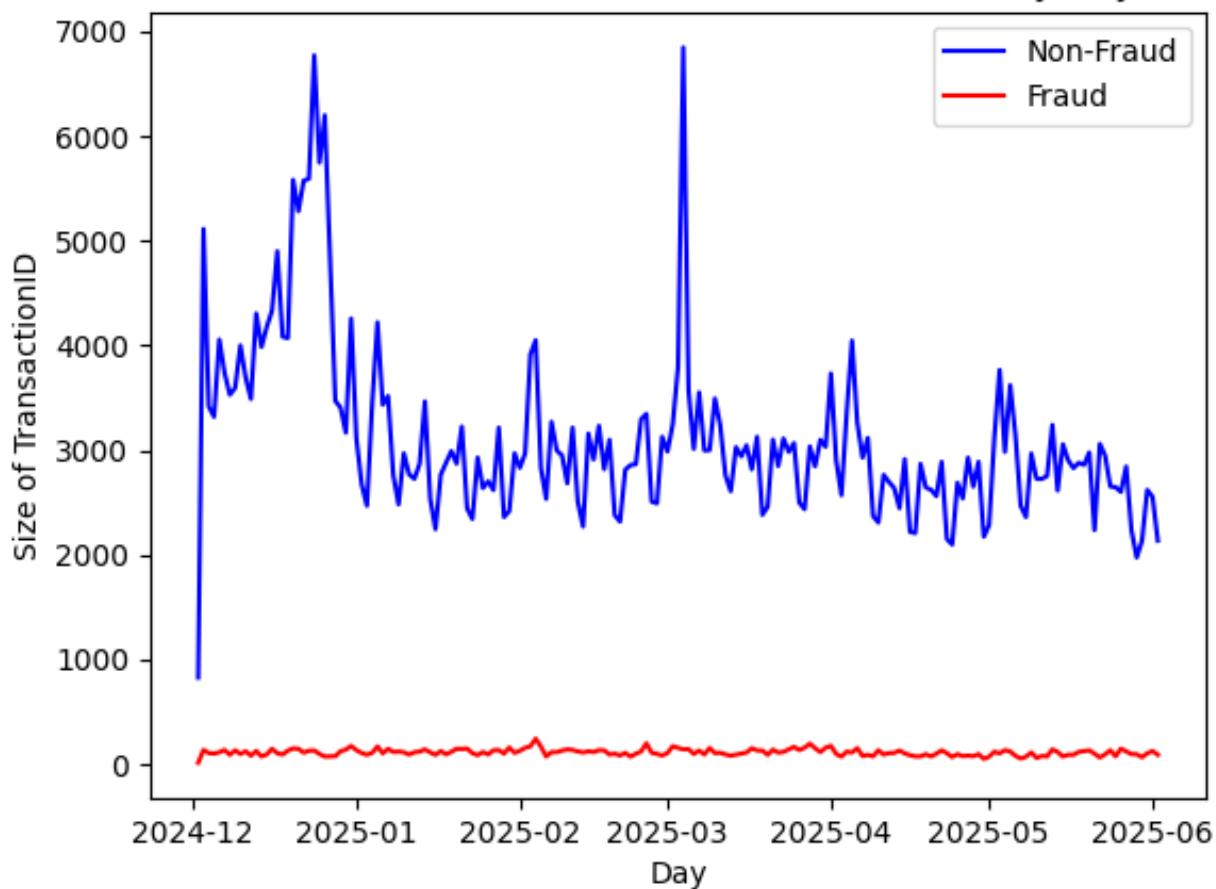




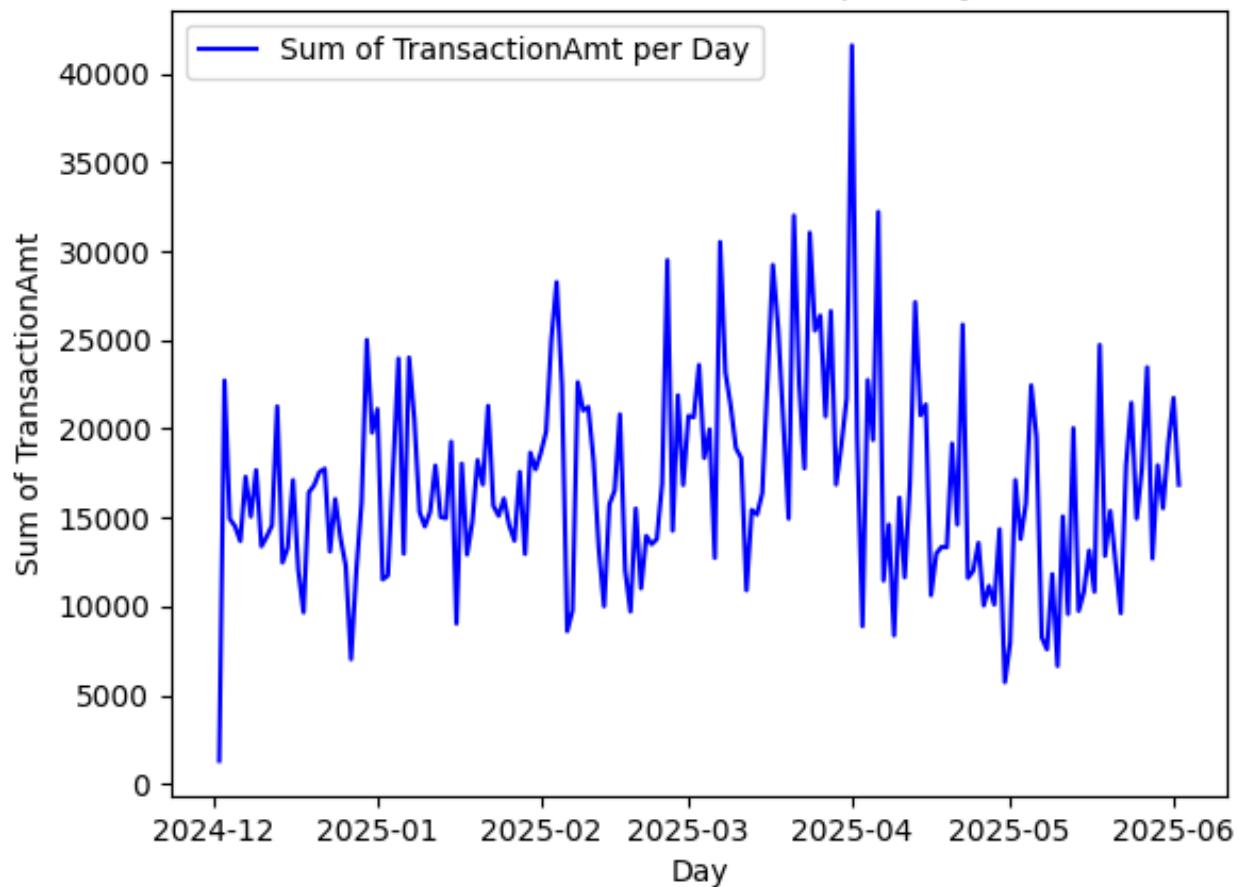
### Size of TransactionID per Day



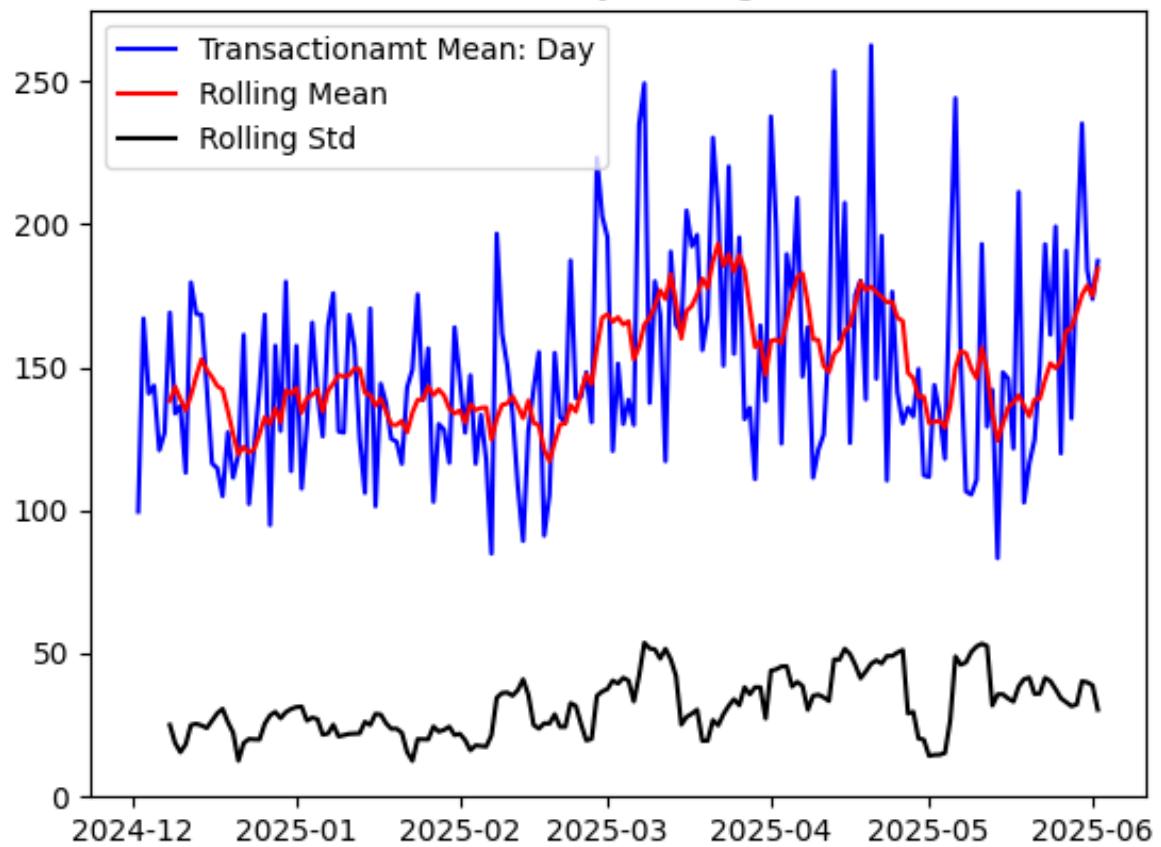
### Size of TransactionID for Fraud vs Non-Fraud by Day

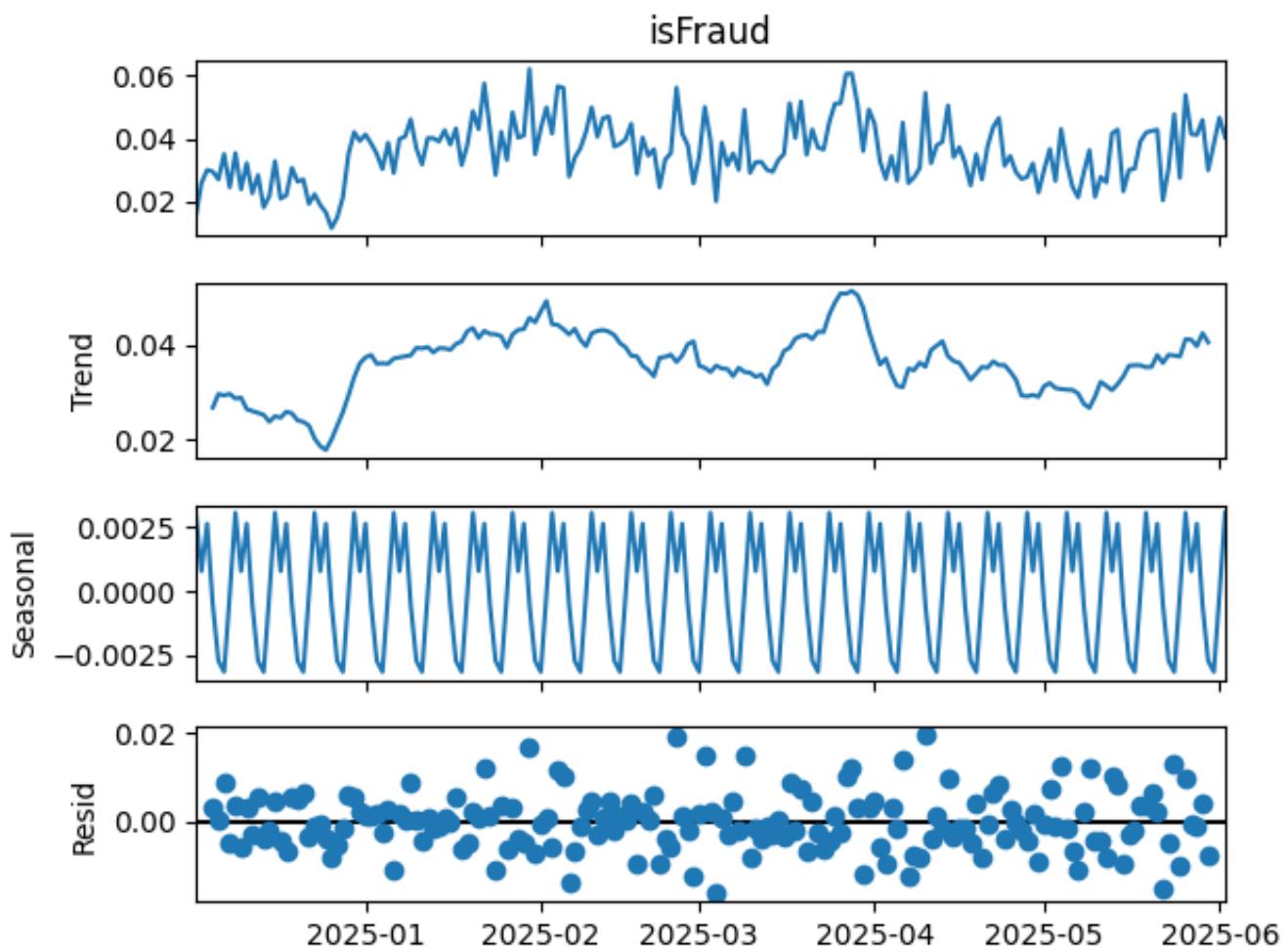


### Sum of TransactionAmt per Day

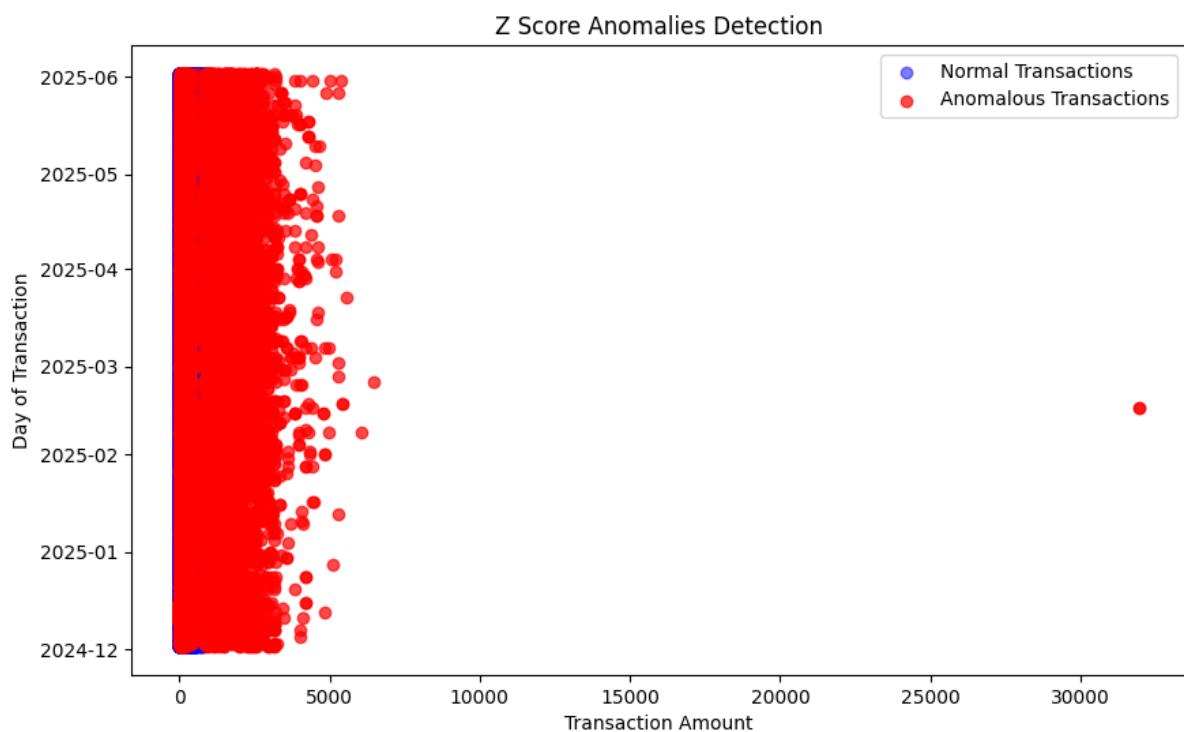


### Transactionamt Day: Rolling Mean & Std

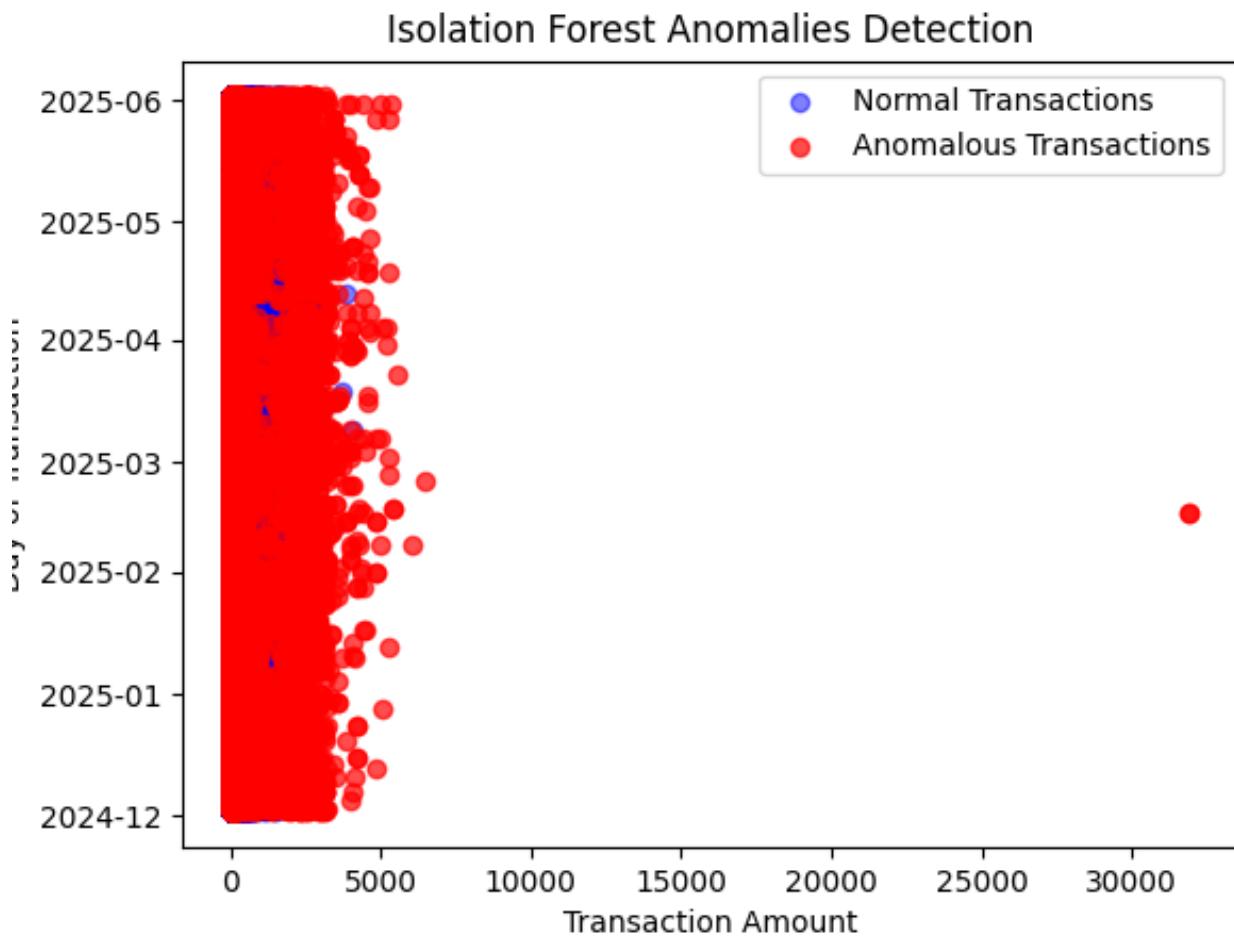




#### Anomaly Detection (Z-Score) - Transactions:



### Anomaly Detection (Isolation Forest) - Transactions:



### Anomaly Detection (K-Means) - Transactions:

### K Means Anomalies Detection

