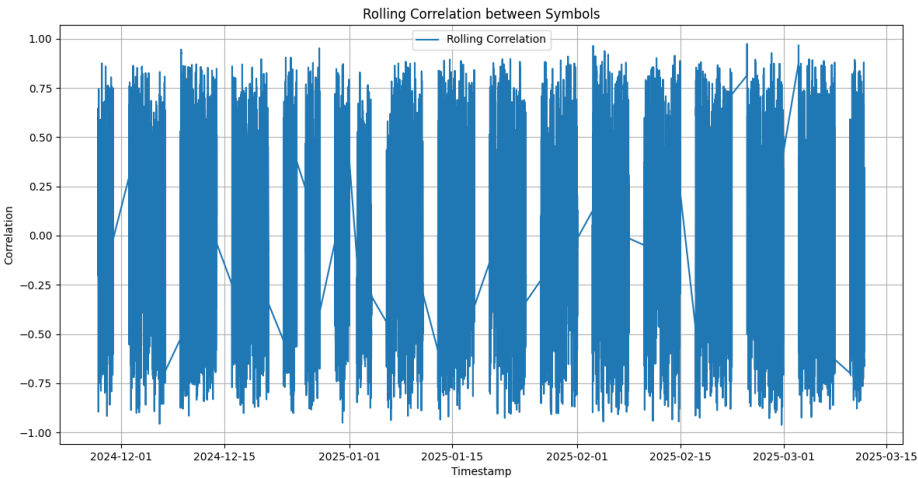
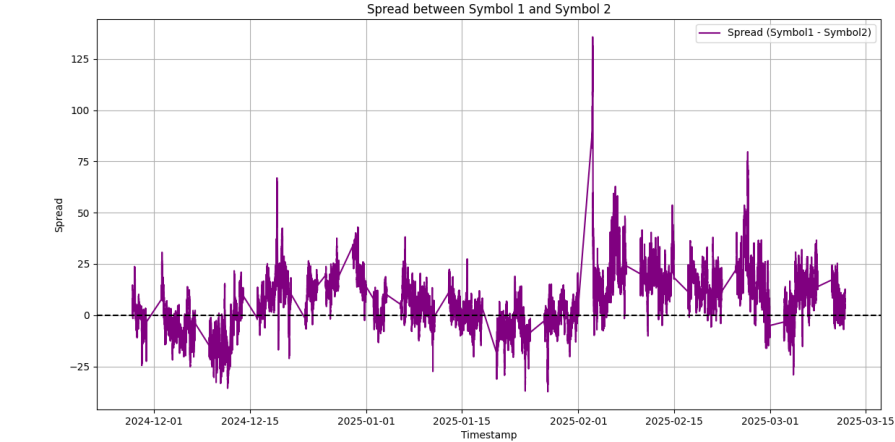
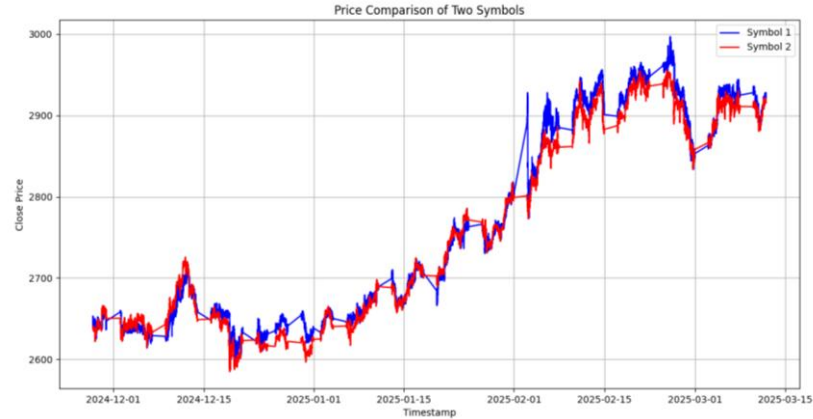
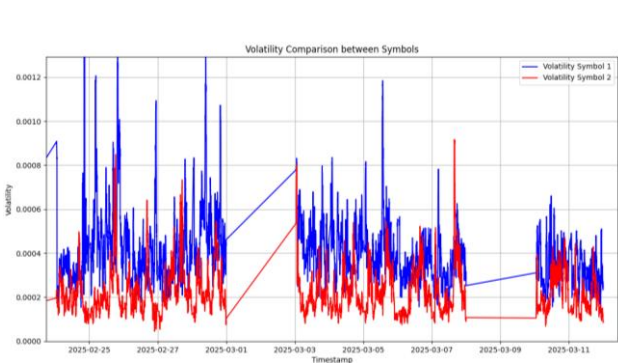
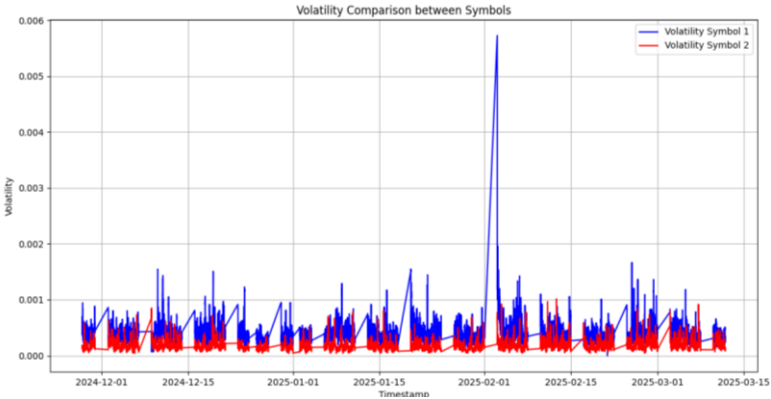


# "Empirical Analysis of Price Cointegration and Predictive Relationships Using Granger Causality"



## Occurrences of Prices within ±1 USD per Day

Date	Count
2024-11-27	24
2024-11-28	199
2024-11-29	111
2024-12-02	120
2024-12-03	92
...	...
2025-03-04	85
2025-03-05	7
2025-03-06	31
2025-03-10	66
2025-03-11	199

## Correlation Analysis

Metric	Value
Pearson Correlation	0.994
Spearman Rank Correlation	0.982
ADF Statistic	-11.35
p-value	1.02e-20

## Granger Causality Test Results

Lags	F-Test	p-Value	Chi² Test	p-Value
1	332.58	0.0000	332.59	0.0000
2	136.73	0.0000	273.48	0.0000
3	87.19	0.0000	261.58	0.0000
4	64.51	0.0000	258.06	0.0000
5	51.43	0.0000	257.20	0.0000
6	42.53	0.0000	255.23	0.0000
7	36.23	0.0000	253.63	0.0000
8	32.01	0.0000	256.10	0.0000
9	28.28	0.0000	254.60	0.0000
10	25.45	0.0000	254.53	0.0000