Financial Time Series
GARCH Models

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Abstract

Volatility modeling and forecasting.

1 Introduction

This report presents computational analysis of time series finance.

2 Mathematical Framework

time_series_finance_plot1.pdf

Figure 1: Primary analysis results.

3 Secondary Analysis

time_series_finance_plot2.pdf

Figure 2: Secondary analysis comparison.

4 Parameter Study

time_series_finance_plot3.pdf

Figure 3: Parameter sensitivity analysis.

5 2D Visualization

time_series_finance_plot4.pdf

Figure 4: Two-dimensional field visualization.

6 Distribution Analysis

time_series_finance_plot5.pdf

Figure 5: Statistical distribution analysis.

7 Time Series

time_series_finance_plot6.pdf

Figure 6: Time series visualization.

8 Results Summary

9 Conclusions

This analysis demonstrates the computational approach to time series finance.