**Time Series Model Interpretation and Forecast Report**

**Data Overview**

We analyze some important companies in the stock market through time series models. Here are some important metrics we observed:

Stock names: Includes TSLA, NVDA ,META and other companies.

RegularMarketPrice: The latest trading price of each stock.

RegularMarketChange: stock price changes.

Previous\_close: The closing price of the previous trading day.

Earnings\_date: Estimated earnings release date.

Year\_target\_est: Analysts’ target price estimate for the stock one year from now.

**Data interpretation**

Through the analysis of time series models, we draw the following conclusions:

Stock Price Changes: We have observed price fluctuations in most stocks, but the overall trend remains stable.

Earnings release date: By looking at the earnings release date, we can see how changes in a company's performance may affect the stock price.

Target price estimates: Analysts have different estimates of stock prices in the next year, and these estimates may be affected by market trends, company performance, and other factors.

**Data prediction**

Based on the above observations and analysis, we can make the following predictions:

Stock price trend: Based on historical data and market trends, we can predict the trend of stock prices in the future period. If the company's performance is good, the stock price may rise; otherwise, it may fall.

Impact of financial report announcement: We can expect that stock prices near the financial report release date may fluctuate greatly, and investors can respond with caution and do risk management.

Target price achievement: We can continue to pay attention to analysts' estimates of the stock's future price and observe whether the actual stock price is consistent with the estimate.

**Conclusion and recommendations**

Through the analysis and prediction of time series models, we can better understand the trend of the stock market and provide a reference for investment decisions. It is recommended that investors fully consider factors such as market trends, company performance and financial report announcements when making decisions, and make rational investment decisions.