

MSM30 STOCK PRICE ANALYSIS AND FORECAST REPORT

MSM30 INDEX



SUMMARY

The report delves into a year-long analysis of the Muscat Securities Market 30 (MSM30) index, covering key aspects such as price trends, trading volumes, and statistical summaries from October 3, 2022, to October 2, 2023. The analysis of closing prices reveals an overall upward trajectory with occasional fluctuations, showcasing the market's resilience. Additionally, examination of trading volumes highlights sporadic spikes, hinting at notable market events or increased trading interest on specific days. The report also provides crucial statistics, including the mean closing price and average daily trading volume, offering a comprehensive snapshot of the MSM30 index's performance.

Incorporating forecasting using the Facebook Prophet model, the report extends its insights into the next 30 days, offering a glimpse into the potential trajectory of the MSM30 index. Despite forecasting a slight decline, the model forecasts a generally consistent trend, emphasizing the importance of ongoing vigilance and in-depth analysis of trading volumes and market dynamics. This report serves as a valuable guide for investors, prompting them to stay informed, conduct further research, and consider multiple variables before making well-informed investment decisions based on the MSM30 index.

DATA SET OVERVIEW

KEY STATISTICS



PRICE SUMMARY :
Mean Closing Price: 4,713.02
Minimum Closing Price: 4,365.98
Maximum Closing Price: 4,928.86
Standard Deviation: 126.52



VOLUME SUMMARY :
Mean Daily Volume: 9.06M
Minimum Daily Volume: 1.42M
Maximum Daily Volume: 206.51M
Standard Deviation: 13.70M



APRIL INSIGHTS :
On April 5, 2023, daily trading volume for MSM30 surged to a peak of 206.51 million shares. This marked a significant deviation from the mean daily volume of 9.06 million shares, illustrating a substantial spike in trading activity.

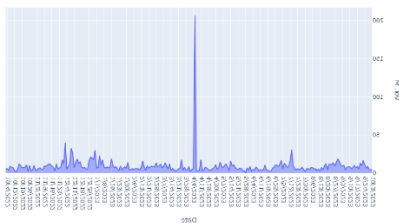


Figure 2: MSM30 DAILY TRADING VOLUME TRENDS

The dataset comprises historical data for the Muscat Securities Market 30 (MSM30) index spanning from October 3, 2022, to October 2, 2023, resulting in 247 data points. Key data columns include date, closing price, opening price, highest and lowest prices, daily volume in millions, and the percentage change.

PRICE TRENDS AND PATTERNS

The line graph representing the closing prices of the MSM30 index demonstrates fluctuations while maintaining an overall upward trajectory. Periodic spikes and dips are observed, indicating market resilience.

VOLUME ANALYSIS

The area graph depicting daily trading volume (in millions) showcases variations in trading activity. Certain days exhibit significant spikes in trading volume, implying potential market events or increased trading interest.

MSM30 Forecast for Next 30 Days



Figure 1: MSM30 Forecast for Next 30 Days

FORECASTING

Utilizing the Facebook Prophet model, we forecasted the MSM30 index prices for the next 30 days, spanning from October 3, 2023, to November 2, 2023. The forecasted prices are as follows (please, for the full forecast see in the appendix):

- October 3, 2023: 4,692.57
- October 4, 2023: 4,693.10
- ...
- November 1, 2023: 4,653.22
- November 2, 2023: 4,654.49

The forecasted prices suggest a slight decline in the index while maintaining a consistent trend in the coming month.

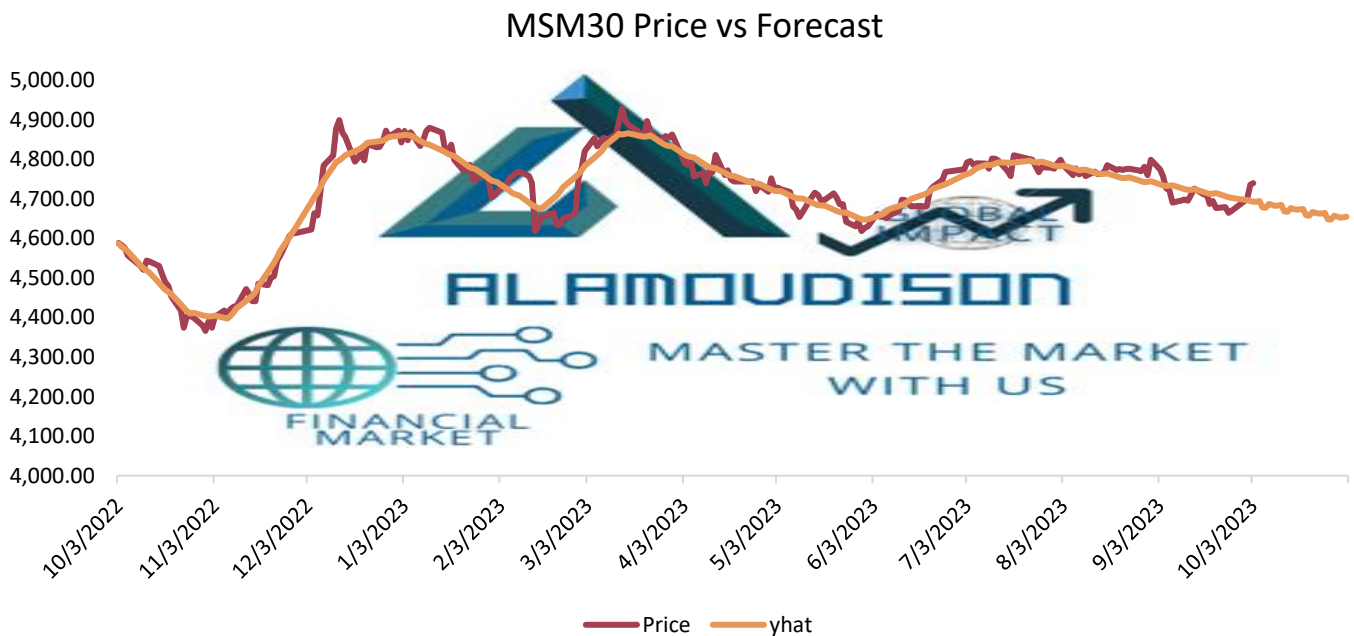


Figure 3: MSM30 Price vs Forecast (yhat)



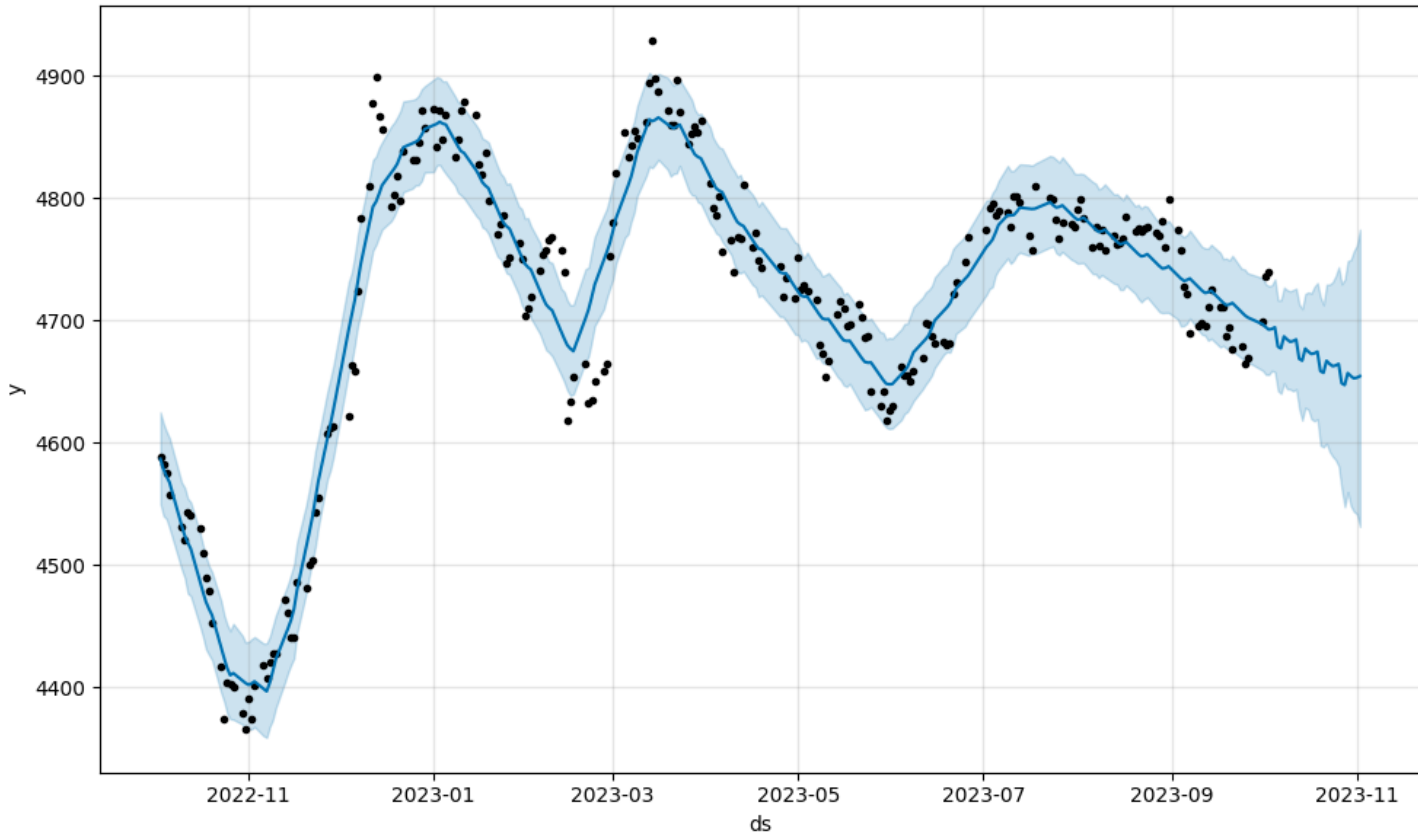


Figure 4: MSM30 PROPHET MODEL FORECAST PLOT

In this plot:

- Black Dots: These dots represent the actual observed prices for the MSM30 index on corresponding dates.
- Blue Line: Represents the forecasted values, showcasing the predicted trend of the MSM30 index.
- Light Blue Shaded Regions: Signify the uncertainty or variability associated with the predictions, providing a range within which the actual prices are likely to fall, adding a level of confidence to the forecasts. The broader the shaded area, the greater the uncertainty in the prediction.



MODEL COMPONENTS

The model components graph illustrates the trend, yearly seasonality, and weekly seasonality, aiding in comprehending the underlying patterns influencing the forecast.

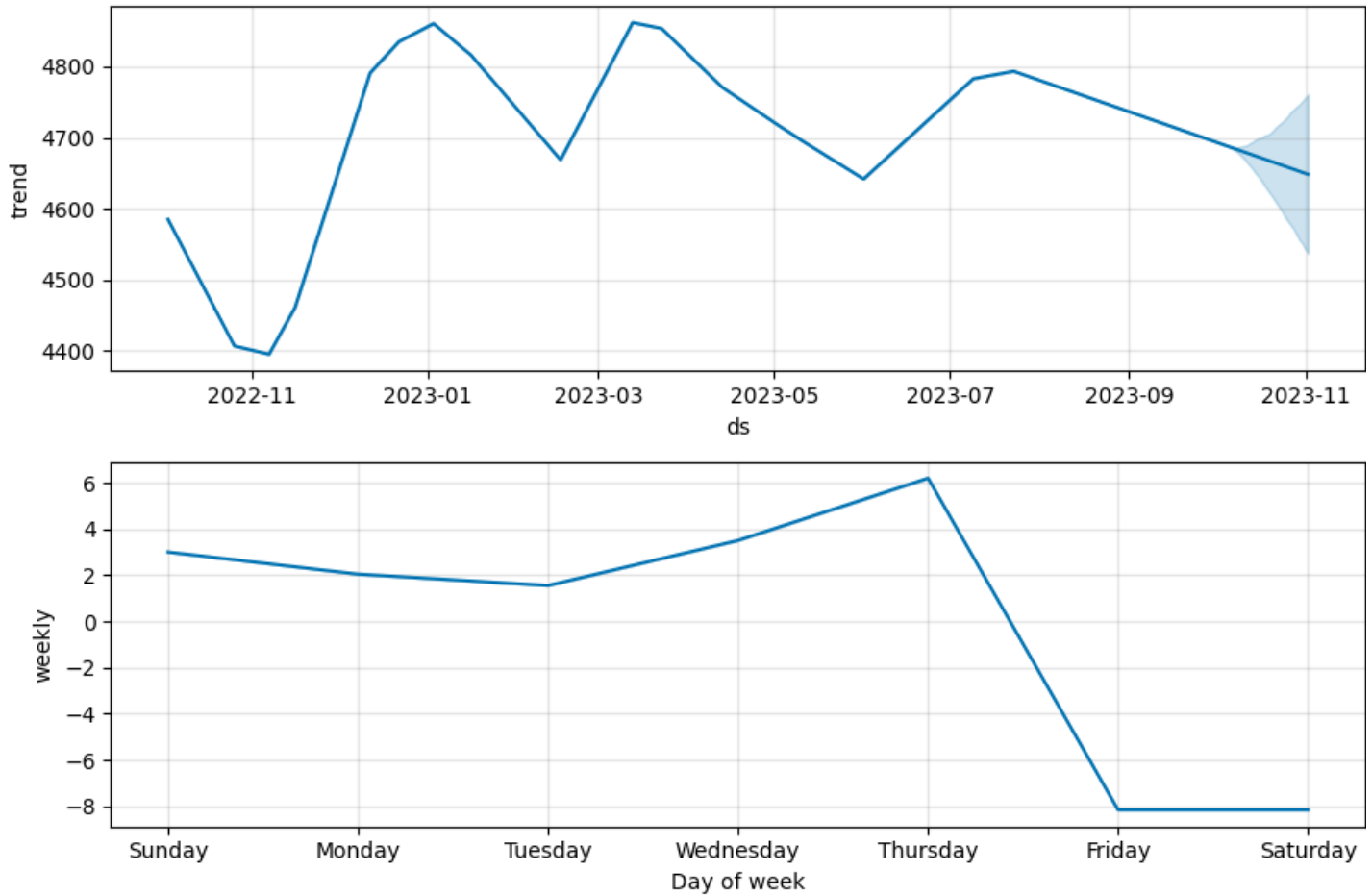


Figure 5: MSM30 FORECAST MODEL COMPONENTS

CONCLUSION

The analysis of the MSM30 index over the past year reveals a generally upward trend in prices with periodic fluctuations. The forecast indicates a stable trend with a slight downward trajectory in the upcoming month. Investors should closely monitor trading volumes and external factors affecting the market for informed investment decisions.

DISCLAIMER :

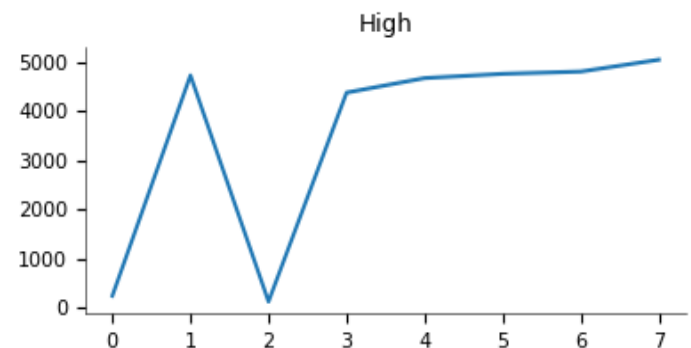
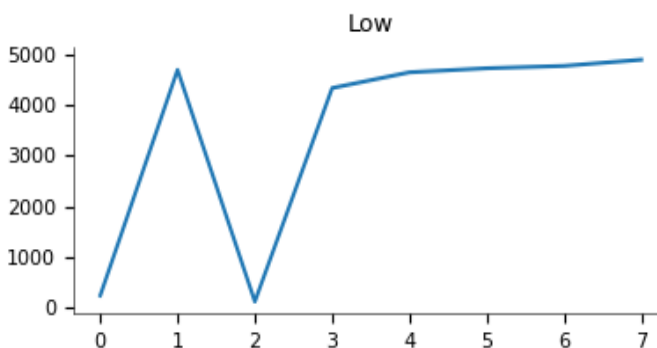
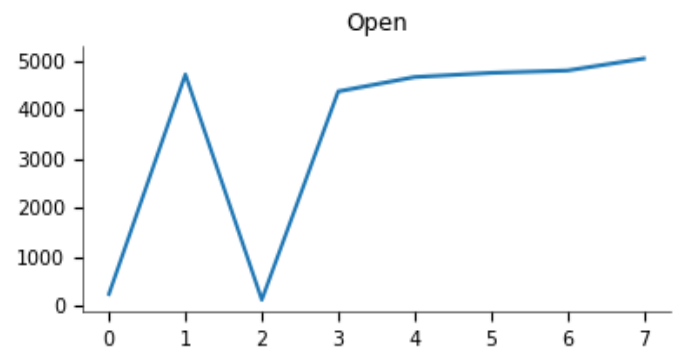
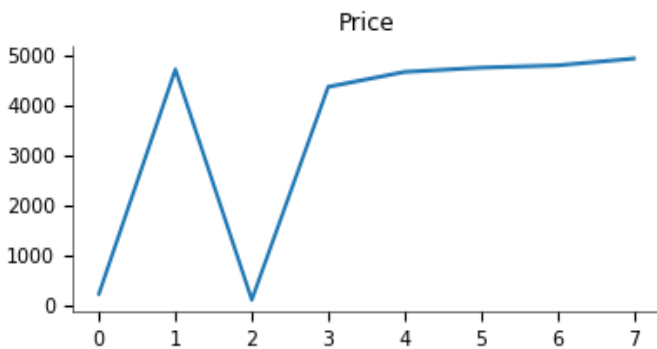
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APPENDIX

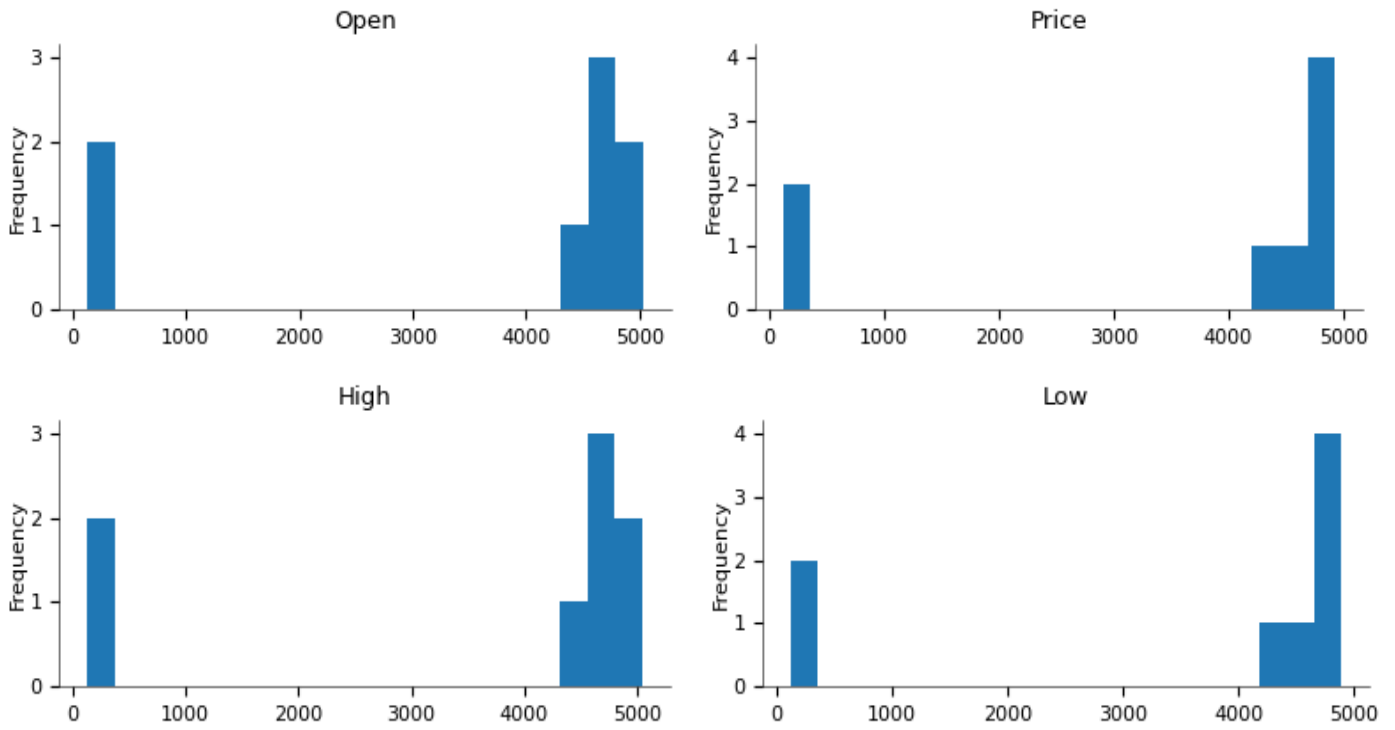
DESCRIPTIVE STATISTICS OF MSM30 INDEX DATA

index	Price	Open	High	Low
count	247.0	247.0	247.0	247.0
mean	4713.017611336033	4713.9784615384615	4729.196396761133	4696.780688259109
std	126.51750838845955	128.07175888716753	127.7430014007914	125.54505501593947
min	4365.98	4368.83	4379.34	4338.38
25%	4662.635	4661.345	4674.35	4648.49
50%	4747.56	4746.85	4760.89	4728.67
75%	4792.865	4794.4599999999999	4807.24	4775.26
max	4928.86	5037.88	5047.94	4896.96
index	Price	Open	High	Low

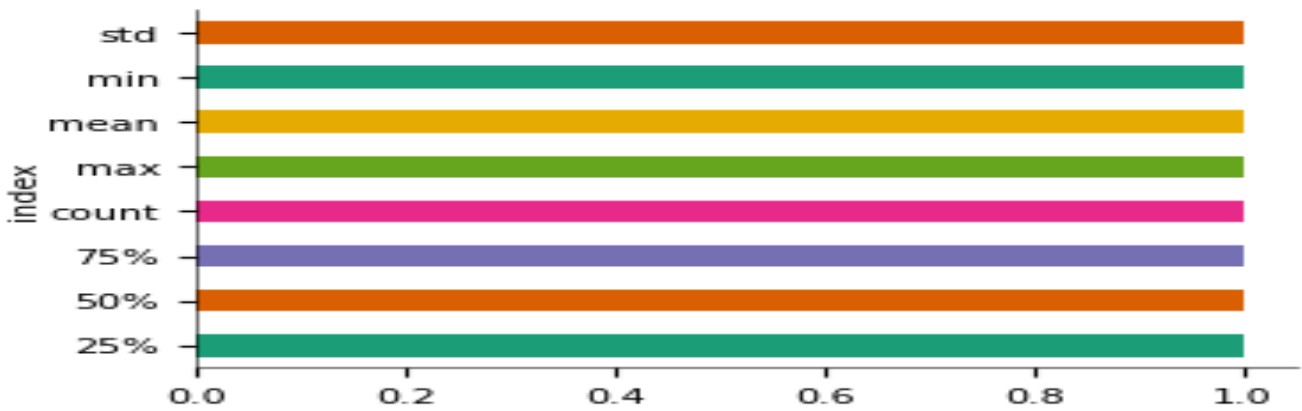
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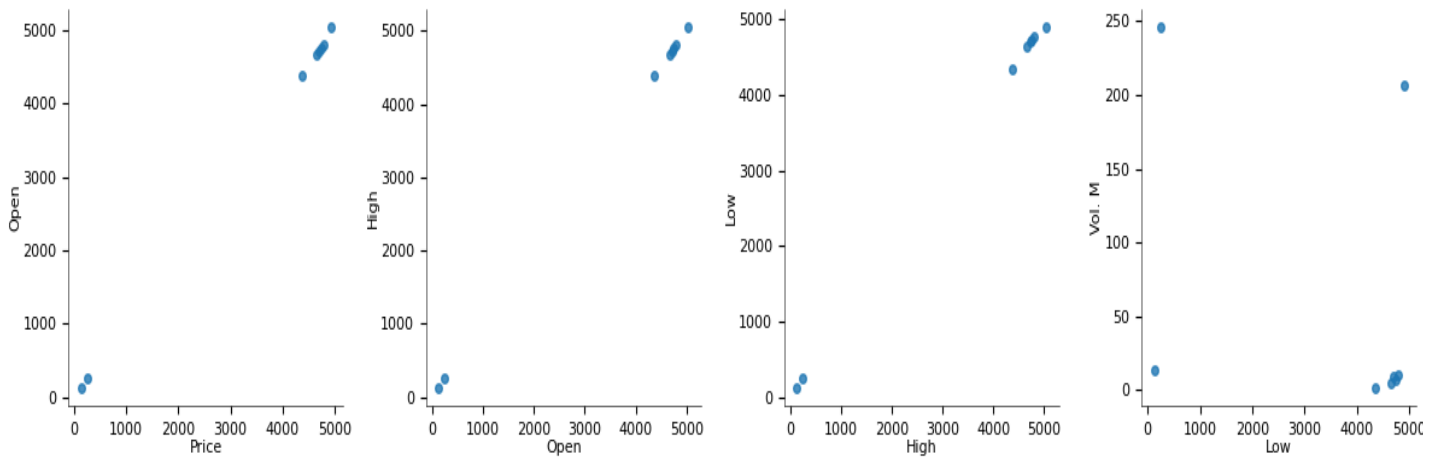
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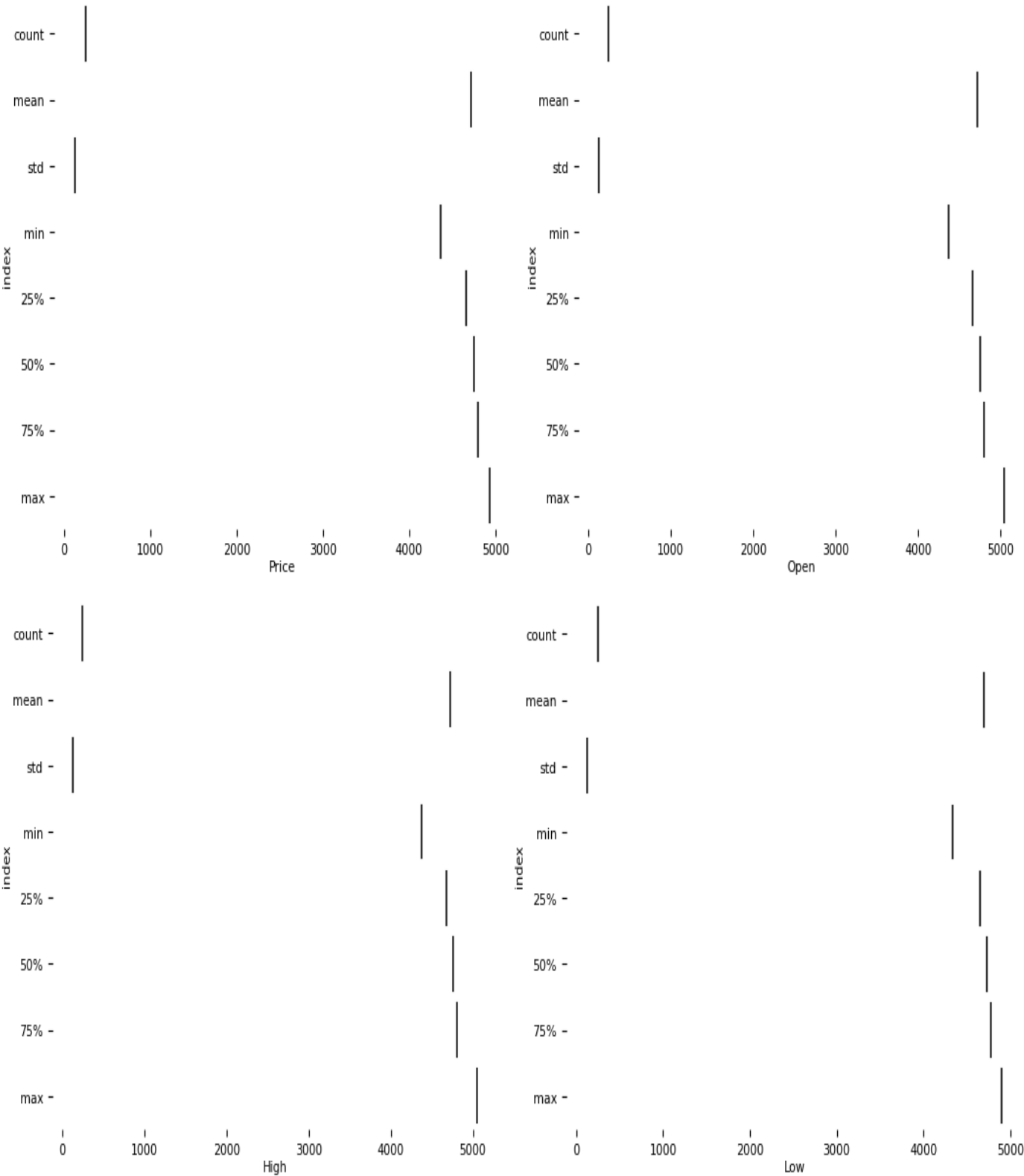
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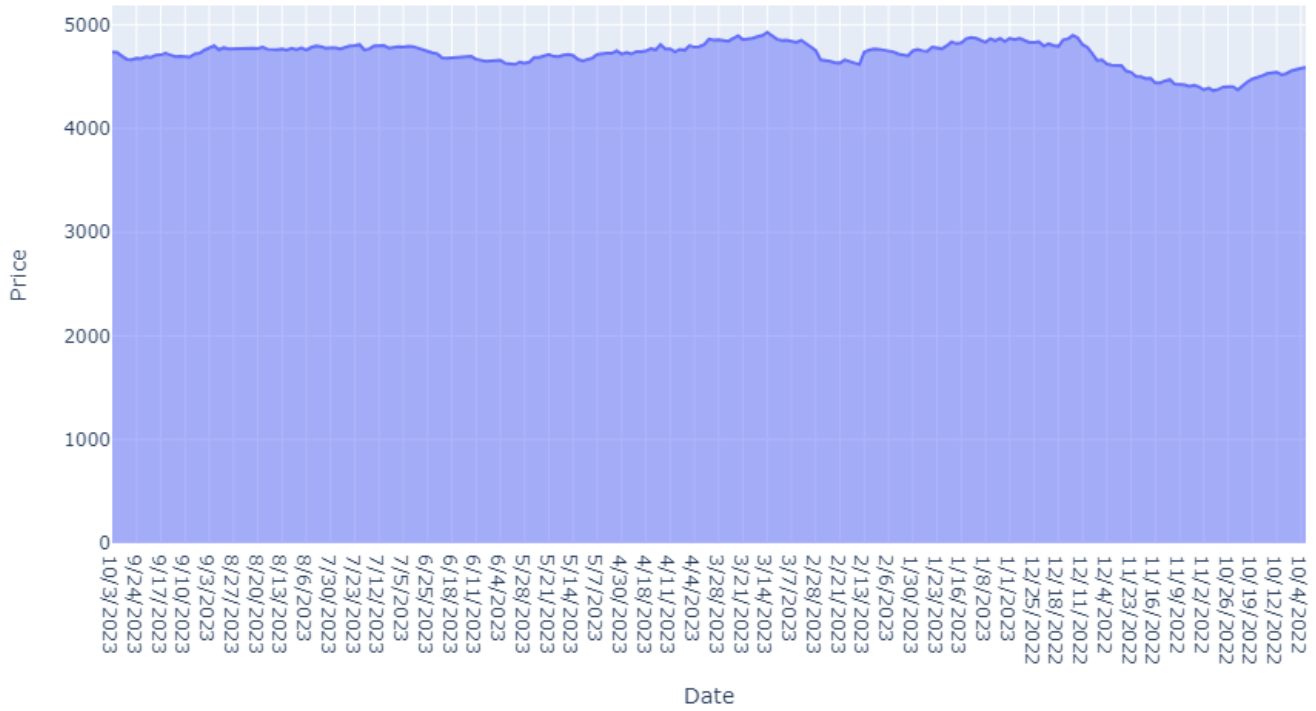
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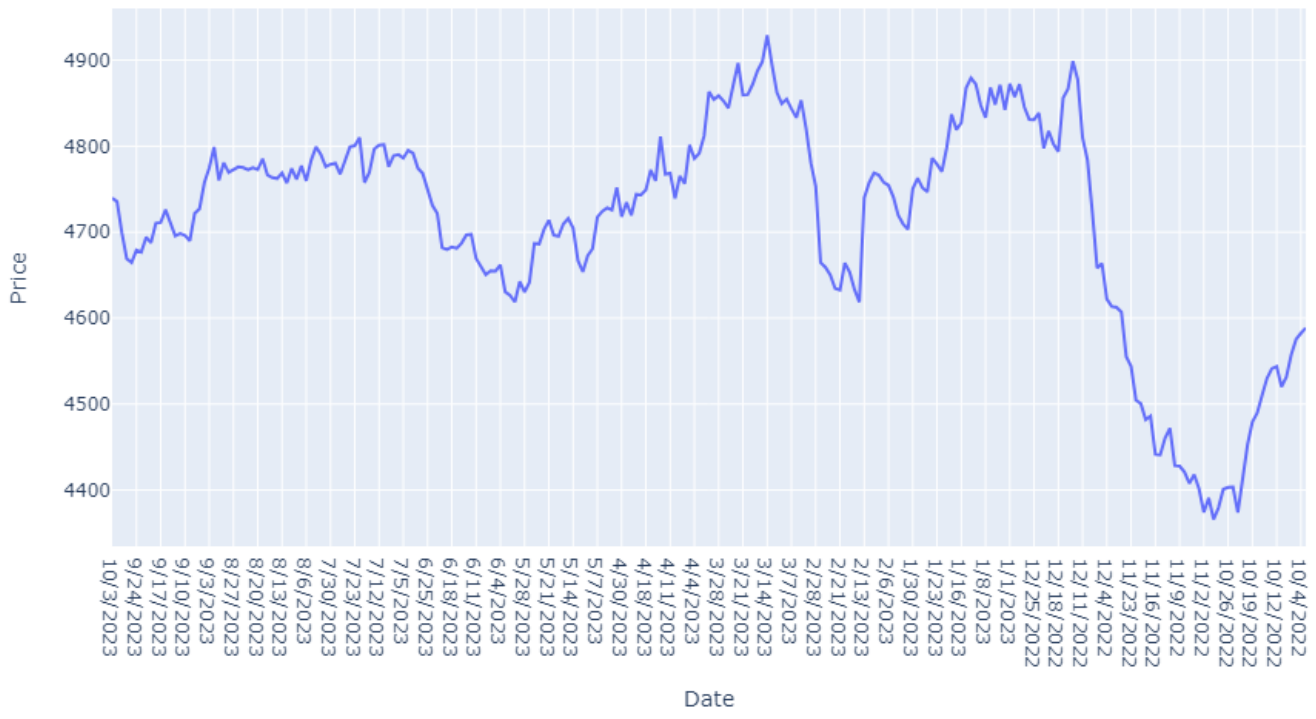
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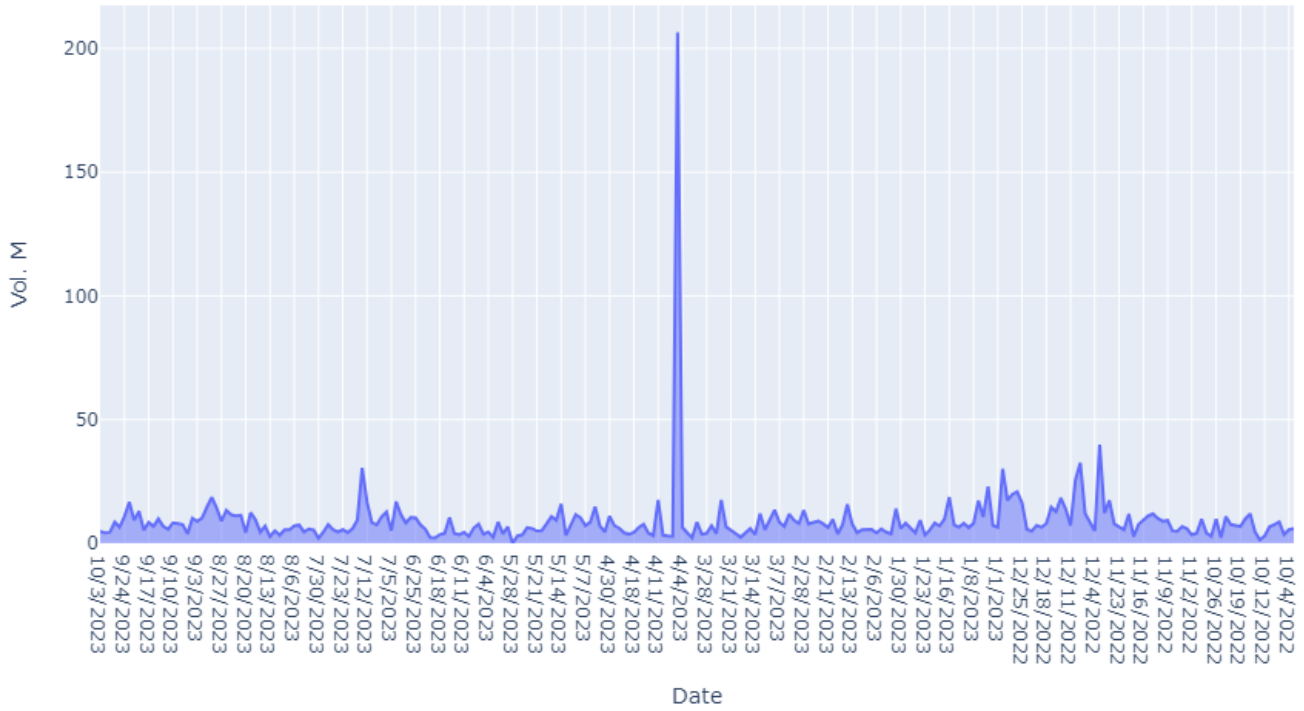
MSM30 INDEX PRICE TRENDS OVER TIME



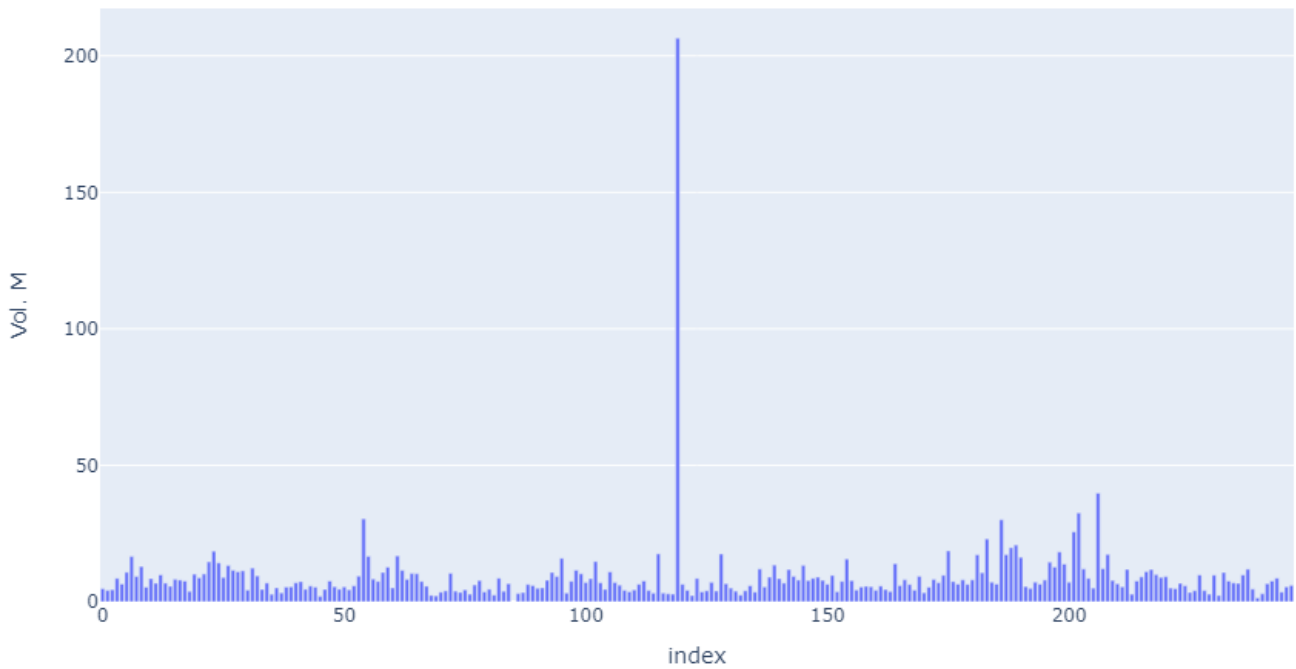
MSM30 INDEX DAILY PRICE TRENDS



MSM30 DAILY TRADING VOLUME TRENDS



MSM30 DAILY TRADING VOLUME DISTRIBUTION



MSM30 PRICE DISTRIBUTION BOXPLOT



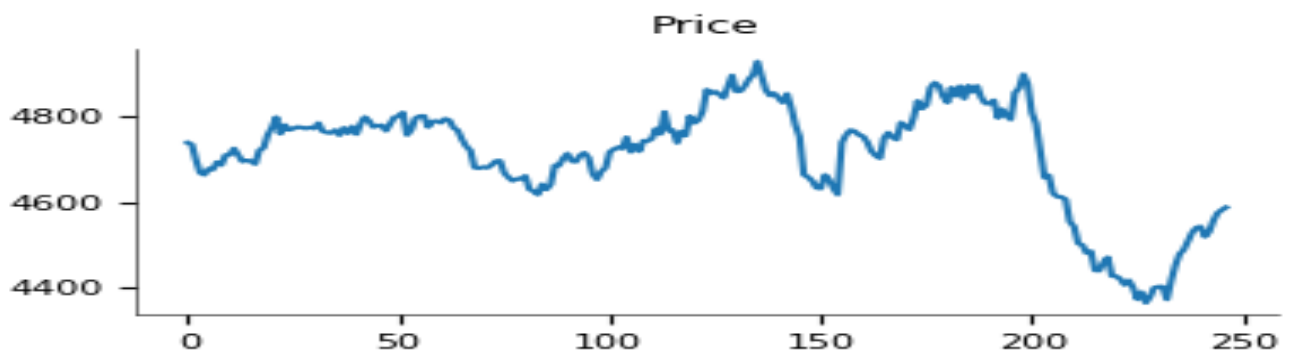
RECENT MSM30 INDEX PRICES (SAMPLE)

index	Date	Price
0	10/3/2023	4739.61
1	10/2/2023	4735.48
2	10/1/2023	4699.08
3	9/26/2023	4669.02
4	9/25/2023	4664.68
5	9/24/2023	4679.02
6	9/21/2023	4676.84
7	9/20/2023	4694.1
...

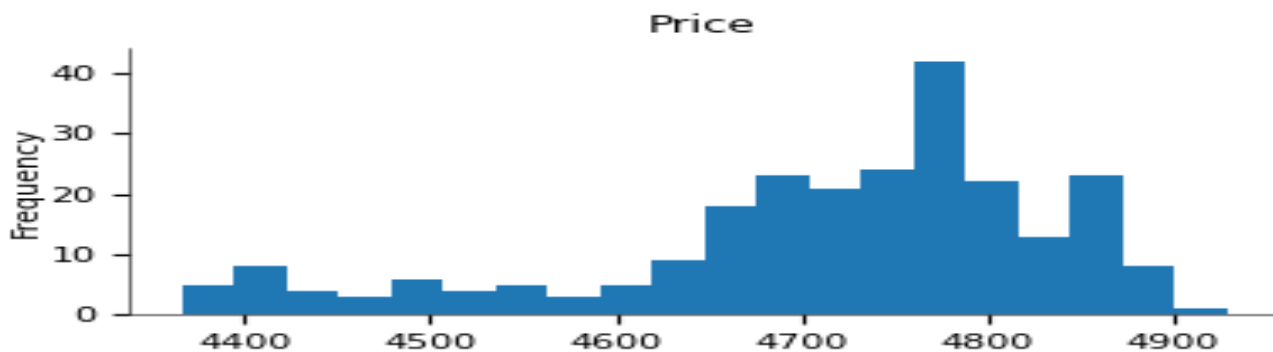
ACTUAL AND FORECASTED MSM30 INDEX PRICES (SELECTED DATES)

Date	Price	yhat	Date	Price	yhat
10/3/2023	4,739.61	4692.57	10/18/2023		4673.16
10/4/2023		4693.10	10/19/2023		4674.43
10/5/2023		4694.38	10/20/2023		4658.64
10/6/2023		4678.59	10/21/2023		4657.22
10/7/2023		4677.16	10/22/2023		4666.96
10/8/2023		4686.90	10/23/2023		4664.58
10/9/2023		4684.52	10/24/2023		4662.66
10/10/2023		4682.60	10/25/2023		4663.19
10/11/2023		4683.13	10/26/2023		4664.46
10/12/2023		4684.41	10/27/2023		4648.67
10/13/2023		4668.61	10/28/2023		4647.25
10/14/2023		4667.19	10/29/2023		4656.99
10/15/2023		4676.93	10/30/2023		4654.61
10/16/2023		4674.55	10/31/2023		4652.69
10/17/2023		4672.63	11/1/2023		4653.22
			11/2/2023		4654.49

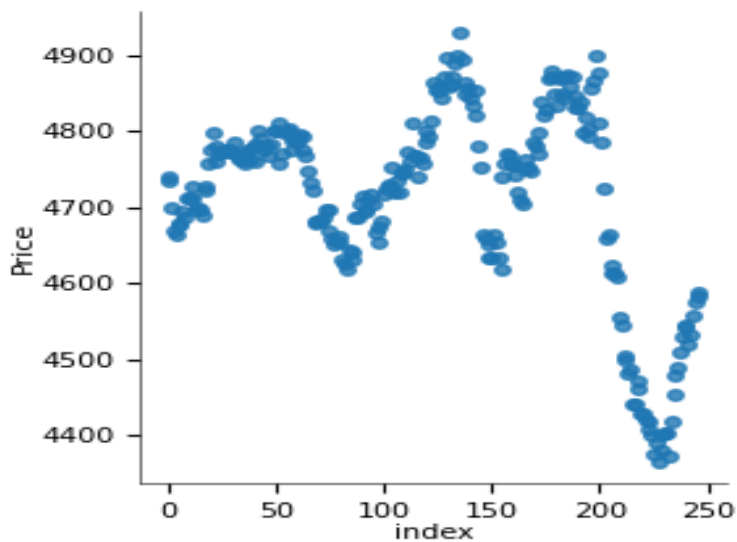
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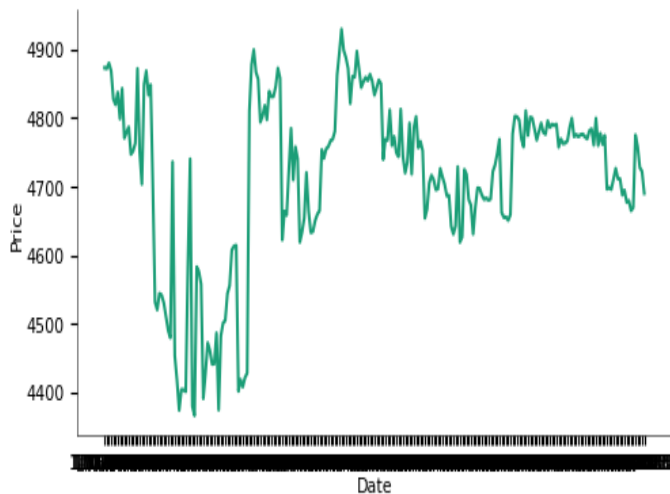
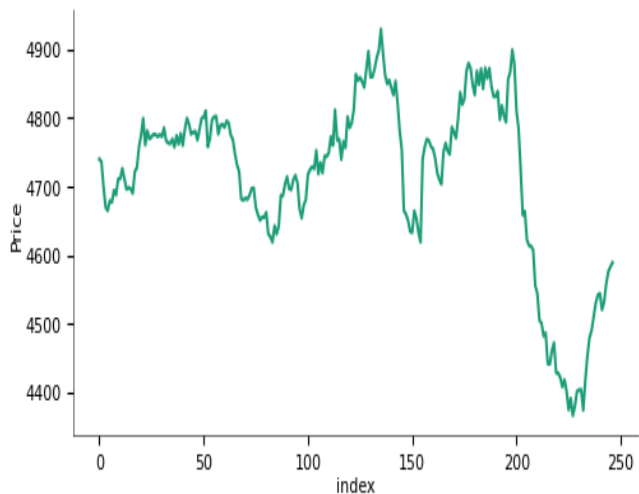
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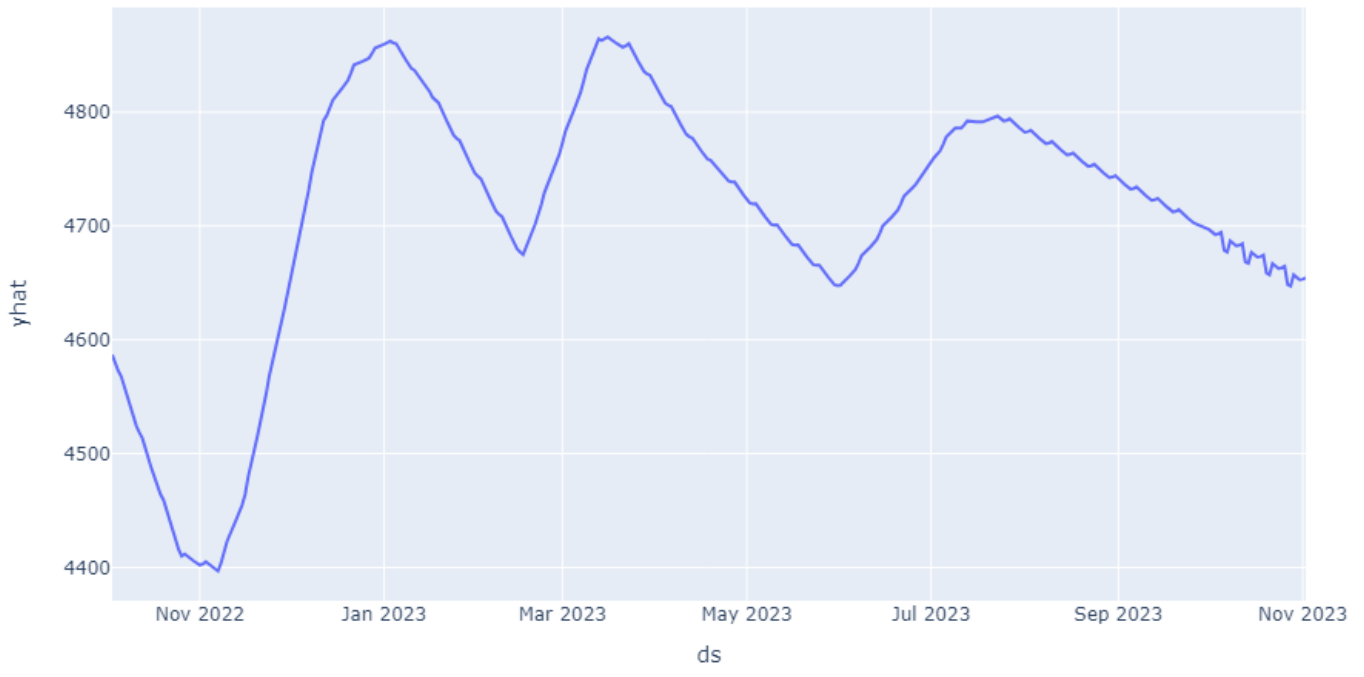
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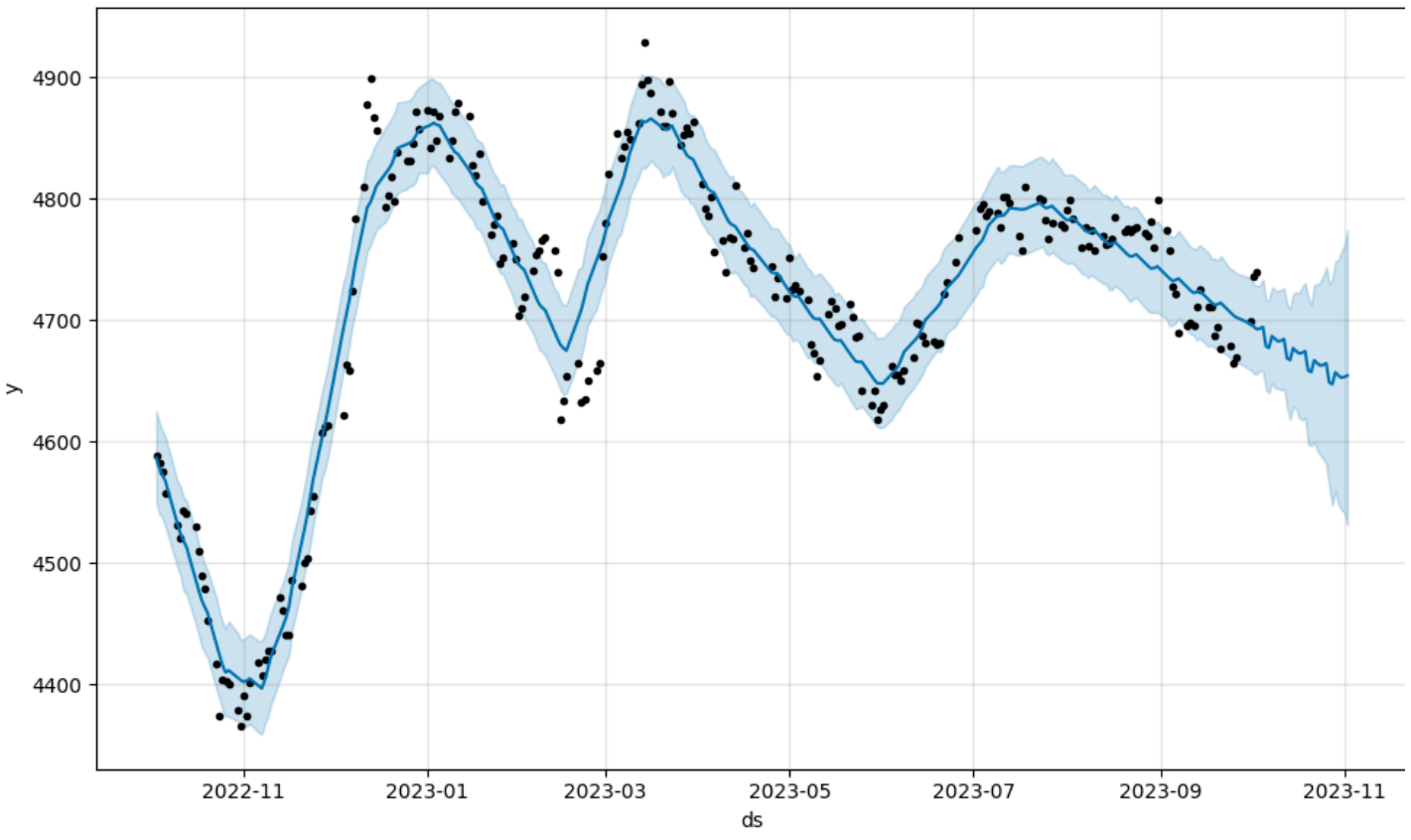
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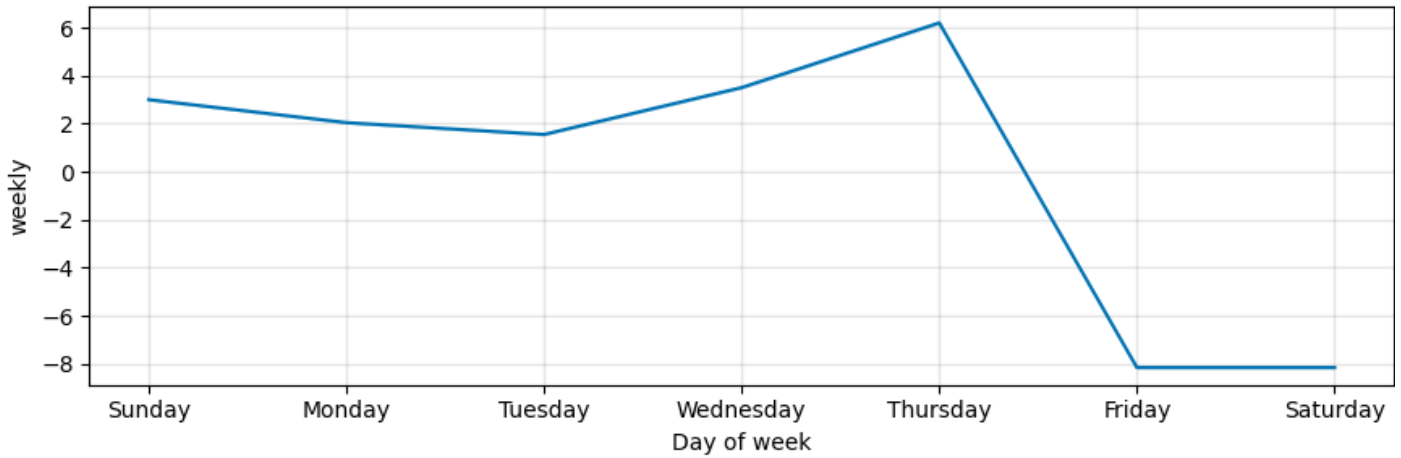
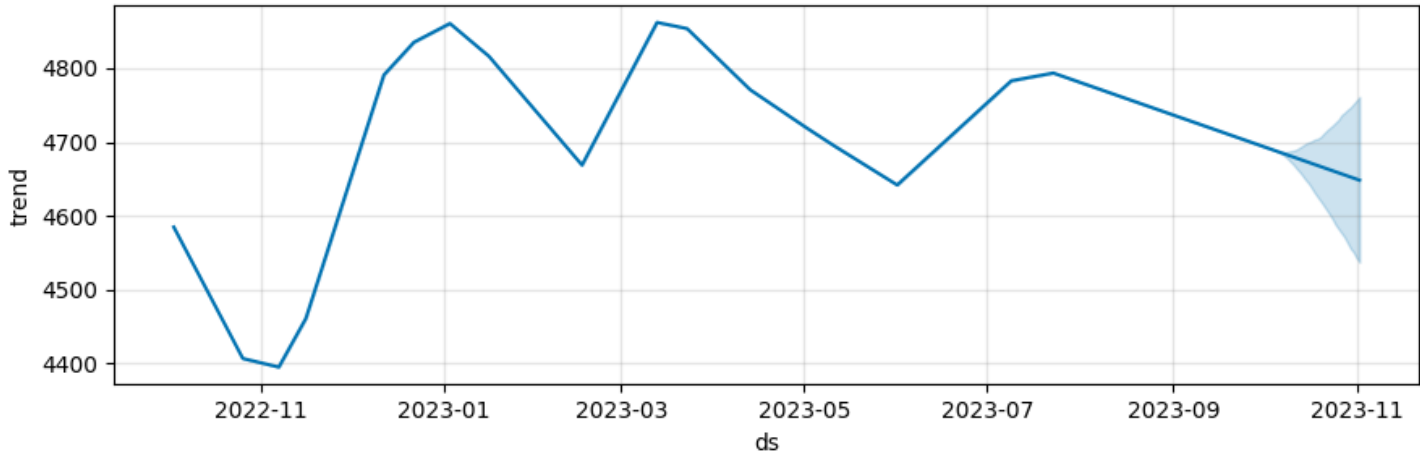
MSM30 FORECASTED PRICE TRENDS



MSM30 PROPHET MODEL FORECAST PLOT



MSM30 FORECAST MODEL COMPONENTS



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