LME ALUMINIUM PRICE PREDICTION

GRU

LSTM

TRANSFORMER

Univariate

(click here)

Univariate

(click here)

Univariate

(click here)

Multivariate

(click here)

Multivariate

(click here)

Prices

Aluminium prices in US\$ per tonne(click here)

 $\begin{cases}{c} \textbf{Copper prices} \ \ in \ US\$ \ per \ tonne(click \ here) \end{cases}$

Zinc prices in US\$ per tonne(click here)

Nickel prices in US\$ per tonne(click here)

Coal prices in Rs per kg(click here)

Excel Sheets Drive Links

 $Aluminium \hbox{\scriptsize (click here)}$

 $Copper \hbox{\tiny (click here)}$

 $Zinc \ {\scriptstyle (click\ here)}$

 $Nickel_{(\text{click here})}$

Errors	MSE	MAE	MAPE
GRU	0.00077411	0.0160, 0.017487	1.6579
LSTM	0.0006084	0.0168429	2.0161
LSTM MULTIVARIATE	0.0007711	0.0203926	1.9768
GRU MUTIVARIATE	0.0008299	0.0222032	2.0703
TRANSFORMER	0.000525377	0.0198714	1.5471

Stock Name	Time	Total Period	Training Period	Testing Period
Aluminium	Start	2008-01-02	2008-01-02	2020-10-14
	End	2023-12-29	2020-10-14	2023-12-29
Copper	Start	2008-01-02	2008-01-02	2020-10-14
	End	2023-12-29	2020-10-14	2023-12-29
Zinc	Start	2008-01-02	2008-01-02	2020-10-14
	End	2023-12-29	2020-10-14	2023-12-29
Nickel	Start	2008-01-02	2008-01-02	2020-10-14
	End	2023-12-29	2020-10-14	2023-12-29