Time Period	Algorithm	Time Stamp	Epochs	Batch Size	Optimiser	MSE
2019 - 2024	LSTM	100	10	4	Adam	29.3460
2019 - 2024	LSTM	100	10	8	Adam	67.8497
2019 - 2024	LSTM	100	10	16	Adam	92.8394
2019 - 2024	LSTM	100	10	32	Adam	71.5254
2019 - 2024	LSTM	100	10	64	Adam	155.8624
2019 - 2024	LSTM	100	25	4	Adam	14.8893
2019 - 2024	LSTM	100	25	8	Adam	20.5761
2019 - 2024	LSTM	100	25	16	Adam	36.5276
2019 - 2024	LSTM	100	25	32	Adam	33.5036
2019 - 2024	LSTM	100	25	64	Adam	55.3625
2019 - 2024	LSTM	100	50	4	Adam	15.2890
2019 - 2024	LSTM	100	50	8	Adam	16.2123
2019 - 2024	LSTM	100	50	16	Adam	17.3859
2019 - 2024	LSTM	100	50	32	Adam	17.3004
2019 - 2024	LSTM	100	50	64	Adam	30.9350
2019 - 2024	LSTM	100	100	4	Adam	17.4259
2019 - 2024	LSTM	100	100	8	Adam	27.7504
2019 - 2024	LSTM	100	100	16	Adam	12.8362
2019 - 2024	LSTM	100	100	32	Adam	12.0574
2019 - 2024	LSTM	100	100	64	Adam	17.0985
2019 - 2024	LSTM	100	200	4	Adam	24.0882
2019 - 2024	LSTM	100	200	8	Adam	21.2384
2019 - 2024	LSTM	100	200	16	Adam	11.3115
2019 - 2024	LSTM	100	200	32	Adam	24.3609
2019 - 2024	LSTM	100	200	64	Adam	15.0410
2019 - 2024	LSTM	100	10	4	Nadam	26.9646
2019 - 2024	LSTM	100	10	8	Nadam	37.6915
2019 - 2024	LSTM	100	10	16	Nadam	58.2821
2019 - 2024	LSTM	100	10	32	Nadam	56.3400
2019 - 2024	LSTM	100	10	64	Nadam	101.7858
2019 - 2024	LSTM	100	25	4	Nadam	15.9883
2019 - 2024	LSTM	100	25	8	Nadam	19.0365
2019 - 2024	LSTM	100	25	16	Nadam	22.3947
2019 - 2024	LSTM	100	25	32	Nadam	29.8551
2019 - 2024	LSTM	100	25	64	Nadam	31.4362
2019 - 2024	LSTM	100	50	4	Nadam	21.0487
2019 - 2024	LSTM	100	50	8	Nadam	25.0413
2019 - 2024	LSTM	100	50	16	Nadam	17.8923

2019 - 2024	LSTM	100	50	32	Nadam	28.3204
2019 - 2024	LSTM	100	50	64	Nadam	37.7077
2019 - 2024	LSTM	100	100	4	Nadam	27.6764
2019 - 2024	LSTM	100	100	8	Nadam	13.7256
2019 - 2024	LSTM	100	100	16	Nadam	24.9714
2019 - 2024	LSTM	100	100	32	Nadam	13.7453
2019 - 2024	LSTM	100	100	64	Nadam	26.4720
2019 - 2024	LSTM	100	200	4	Nadam	18.0694
2019 - 2024	LSTM	100	200	8	Nadam	15.3506
2019 - 2024	LSTM	100	200	16	Nadam	11.5406
2019 - 2024	LSTM	100	200	32	Nadam	20.9899
2019 - 2024	LSTM	100	200	64	Nadam	32.6851
2019 - 2024	LSTM	100	10	4	RMSProp	31.7932
2019 - 2024	LSTM	100	10	8	RMSProp	31.0416
2019 - 2024	LSTM	100	10	16	RMSProp	58.3315
2019 - 2024	LSTM	100	10	32	RMSProp	36.3829
2019 - 2024	LSTM	100	10	64	RMSProp	134.8350
2019 - 2024	LSTM	100	25	4	RMSProp	15.9370
2019 - 2024	LSTM	100	25	8	RMSProp	20.8431
2019 - 2024	LSTM	100	25	16	RMSProp	20.4963
2019 - 2024	LSTM	100	25	32	RMSProp	23.9280
2019 - 2024	LSTM	100	25	64	RMSProp	32.7114
2019 - 2024	LSTM	100	50	4	RMSProp	14.4807
2019 - 2024	LSTM	100	50	8	RMSProp	14.0113
2019 - 2024	LSTM	100	50	16	RMSProp	18.2473
2019 - 2024	LSTM	100	50	32	RMSProp	15.4637
2019 - 2024	LSTM	100	50	64	RMSProp	21.1052
2019 - 2024	LSTM	100	100	4	RMSProp	13.1497
2019 - 2024	LSTM	100	100	8	RMSProp	13.4241
2019 - 2024	LSTM	100	100	16	RMSProp	15.9560
2019 - 2024	LSTM	100	100	32	RMSProp	16.5954
2019 - 2024	LSTM	100	100	64	RMSProp	13.8186
2019 - 2024	LSTM	100	200	4	RMSProp	17.5969
2019 - 2024	LSTM	100	200	8	RMSProp	12.6617
2019 - 2024	LSTM	100	200	16	RMSProp	17.7553
2019 - 2024	LSTM	100	200	32	RMSProp	16.5398
2019 - 2024	LSTM	100	200	64	RMSProp	17.8885
2019 - 2024	GRU	100	10	4	Adam	22.9214
2019 - 2024	GRU	100	10	8	Adam	17.4855
2019 - 2024	GRU	100	10	16	Adam	21.4177

2019 - 2024	GRU	100	10	32	Adam	20.6056
2019 - 2024	GRU	100	10	64	Adam	49.8114
2019 - 2024	GRU	100	25	4	Adam	15.9560
2019 - 2024	GRU	100	25	8	Adam	18.6492
2019 - 2024	GRU	100	25	16	Adam	29.1443
2019 - 2024	GRU	100	25	32	Adam	16.4627
2019 - 2024	GRU	100	25	64	Adam	21.5999
2019 - 2024	GRU	100	50	4	Adam	17.0184
2019 - 2024	GRU	100	50	8	Adam	18.0526
2019 - 2024	GRU	100	50	16	Adam	15.3115
2019 - 2024	GRU	100	50	32	Adam	18.6720
2019 - 2024	GRU	100	50	64	Adam	17.9797
2019 - 2024	GRU	100	100	4	Adam	27.1159
2019 - 2024	GRU	100	100	8	Adam	23.2763
2019 - 2024	GRU	100	100	16	Adam	16.8124
2019 - 2024	GRU	100	100	32	Adam	14.5066
2019 - 2024	GRU	100	100	64	Adam	13.2683
2019 - 2024	GRU	100	200	4	Adam	17.8772
2019 - 2024	GRU	100	200	8	Adam	25.8573
2019 - 2024	GRU	100	200	16	Adam	17.8089
2019 - 2024	GRU	100	200	32	Adam	29.2321
2019 - 2024	GRU	100	200	64	Adam	15.3871
2019 - 2024	GRU	100	10	4	Nadam	18.5328
2019 - 2024	GRU	100	10	8	Nadam	28.4929
2019 - 2024	GRU	100	10	16	Nadam	17.7512
2019 - 2024	GRU	100	10	32	Nadam	20.7425
2019 - 2024	GRU	100	10	64	Nadam	48.0795
2019 - 2024	GRU	100	25	4	Nadam	21.9590
2019 - 2024	GRU	100	25	8	Nadam	15.0211
2019 - 2024	GRU	100	25	16	Nadam	24.5049
2019 - 2024	GRU	100	25	32	Nadam	14.5162
2019 - 2024	GRU	100	25	64	Nadam	25.1469
2019 - 2024	GRU	100	50	4	Nadam	21.0660
2019 - 2024	GRU	100	50	8	Nadam	20.0024
2019 - 2024	GRU	100	50	16	Nadam	20.2949
2019 - 2024	GRU	100	50	32	Nadam	15.2862
2019 - 2024	GRU	100	50	64	Nadam	15.9410
2019 - 2024	GRU	100	100	4	Nadam	20.2290
2019 - 2024	GRU	100	100	8	Nadam	20.3328

2019 - 2024	GRU	100	100	16	Nadam	15.1519
2019 - 2024	GRU	100	100	32	Nadam	18.3765
2019 - 2024	GRU	100	100	64	Nadam	18.2733
2019 - 2024	GRU	100	200	4	Nadam	24.1368
2019 - 2024	GRU	100	200	8	Nadam	19.3312
2019 - 2024	GRU	100	200	16	Nadam	15.3819
2019 - 2024	GRU	100	200	32	Nadam	15.5926
2019 - 2024	GRU	100	200	64	Nadam	17.4314
2019 - 2024	GRU	100	10	4	RMSProp	18.3747
2019 - 2024	GRU	100	10	8	RMSProp	18.4718
2019 - 2024	GRU	100	10	16	RMSProp	17.8332
2019 - 2024	GRU	100	10	32	RMSProp	18.2967
2019 - 2024	GRU	100	10	64	RMSProp	30.4751
2019 - 2024	GRU	100	25	4	RMSProp	22.8989
2019 - 2024	GRU	100	25	8	RMSProp	16.0360
2019 - 2024	GRU	100	25	16	RMSProp	22.8860
2019 - 2024	GRU	100	25	32	RMSProp	16.3245
2019 - 2024	GRU	100	25	64	RMSProp	16.4424
2019 - 2024	GRU	100	50	4	RMSProp	20.7783
2019 - 2024	GRU	100	50	8	RMSProp	19.6965
2019 - 2024	GRU	100	50	16	RMSProp	13.1183
2019 - 2024	GRU	100	50	32	RMSProp	13.9123
2019 - 2024	GRU	100	50	64	RMSProp	15.2399
2019 - 2024	GRU	100	100	4	RMSProp	22.1115
2019 - 2024	GRU	100	100	8	RMSProp	22.0487
2019 - 2024	GRU	100	100	16	RMSProp	15.6376
2019 - 2024	GRU	100	100	32	RMSProp	12.0337
2019 - 2024	GRU	100	100	64	RMSProp	13.4376
2019 - 2024	GRU	100	200	4	RMSProp	30.5170
2019 - 2024	GRU	100	200	8	RMSProp	19.5259
2019 - 2024	GRU	100	200	16	RMSProp	20.8339
2019 - 2024	GRU	100	200	32	RMSProp	11.7720
2019 - 2024	GRU	100	200	64	RMSProp	15.6890
2019 - 2024	CNN	100	10	4	Adam	43.0401
2019 - 2024	CNN	100	10	8	Adam	48.7402
2019 - 2024	CNN	100	10	16	Adam	53.2724
2019 - 2024	CNN	100	10	32	Adam	44.5034
2019 - 2024	CNN	100	10	64	Adam	38.3233
2019 - 2024	CNN	100	25	4	Adam	28.2763
2019 - 2024	CNN	100	25	8	Adam	23.9176

2019 - 2024	CNN	100	25	16	Adam	28.3497
2019 - 2024	CNN	100	25	32	Adam	35.9310
2019 - 2024	CNN	100	25	64	Adam	167.7806
2019 - 2024	CNN	100	50	4	Adam	29.2910
2019 - 2024	CNN	100	50	8	Adam	33.9517
2019 - 2024	CNN	100	50	16	Adam	24.2170
2019 - 2024	CNN	100	50	32	Adam	25.4763
2019 - 2024	CNN	100	50	64	Adam	31.9526
2019 - 2024	CNN	100	100	4	Adam	26.7870
2019 - 2024	CNN	100	100	8	Adam	32.4473
2019 - 2024	CNN	100	100	16	Adam	31.7840
2019 - 2024	CNN	100	100	32	Adam	29.0027
2019 - 2024	CNN	100	100	64	Adam	28.5176
2019 - 2024	CNN	100	200	4	Adam	35.6457
2019 - 2024	CNN	100	200	8	Adam	29.4886
2019 - 2024	CNN	100	200	16	Adam	27.7320
2019 - 2024	CNN	100	200	32	Adam	30.4931
2019 - 2024	CNN	100	200	64	Adam	24.9629
2019 - 2024	CNN	100	10	4	Nadam	29.9053
2019 - 2024	CNN	100	10	8	Nadam	35.0971
2019 - 2024	CNN	100	10	16	Nadam	33.3861
2019 - 2024	CNN	100	10	32	Nadam	43.3123
2019 - 2024	CNN	100	10	64	Nadam	71.1837
2019 - 2024	CNN	100	25	4	Nadam	24.7456
2019 - 2024	CNN	100	25	8	Nadam	27.2888
2019 - 2024	CNN	100	25	16	Nadam	28.5189
2019 - 2024	CNN	100	25	32	Nadam	34.2808
2019 - 2024	CNN	100	25	64	Nadam	60.8553
2019 - 2024	CNN	100	50	4	Nadam	24.3631
2019 - 2024	CNN	100	50	8	Nadam	26.8526
2019 - 2024	CNN	100	50	16	Nadam	24.4783
2019 - 2024	CNN	100	50	32	Nadam	36.5957
2019 - 2024	CNN	100	50	64	Nadam	38.5448
2019 - 2024	CNN	100	100	4	Nadam	28.9275
2019 - 2024	CNN	100	100	8	Nadam	32.6809
2019 - 2024	CNN	100	100	16	Nadam	24.1802
2019 - 2024	CNN	100	100	32	Nadam	27.0083
2019 - 2024	CNN	100	100	64	Nadam	33.9069
2019 - 2024	CNN	100	200	4	Nadam	37.5469

2019 - 2024	CNN	100	200	8	Nadam	31.4444
2019 - 2024	CNN	100	200	16	Nadam	27.7926
2019 - 2024	CNN	100	200	32	Nadam	26.0995
2019 - 2024	CNN	100	200	64	Nadam	26.9887
2019 - 2024	CNN	100	10	4	RMSProp	38.8091
2019 - 2024	CNN	100	10	8	RMSProp	60.9110
2019 - 2024	CNN	100	10	16	RMSProp	58.6150
2019 - 2024	CNN	100	10	32	RMSProp	69.9424
2019 - 2024	CNN	100	10	64	RMSProp	101.8844
2019 - 2024	CNN	100	25	4	RMSProp	47.5693
2019 - 2024	CNN	100	25	8	RMSProp	27.7877
2019 - 2024	CNN	100	25	16	RMSProp	33.0589
2019 - 2024	CNN	100	25	32	RMSProp	35.3076
2019 - 2024	CNN	100	25	64	RMSProp	33.2872
2019 - 2024	CNN	100	50	4	RMSProp	40.7175
2019 - 2024	CNN	100	50	8	RMSProp	36.1028
2019 - 2024	CNN	100	50	16	RMSProp	30.7447
2019 - 2024	CNN	100	50	32	RMSProp	31.4522
2019 - 2024	CNN	100	50	64	RMSProp	41.1199
2019 - 2024	CNN	100	100	4	RMSProp	29.2628
2019 - 2024	CNN	100	100	8	RMSProp	26.4164
2019 - 2024	CNN	100	100	16	RMSProp	32.0699
2019 - 2024	CNN	100	100	32	RMSProp	23.7318
2019 - 2024	CNN	100	100	64	RMSProp	46.1128
2019 - 2024	CNN	100	200	4	RMSProp	26.5556
2019 - 2024	CNN	100	200	8	RMSProp	32.3521
2019 - 2024	CNN	100	200	16	RMSProp	31.9860
2019 - 2024	CNN	100	200	32	RMSProp	30.2930
2019 - 2024	CNN	100	200	64	RMSProp	32.0017
2019 - 2024	FFNN	100	10	4	Adam	73.3378
2019 - 2024	FFNN	100	10	8	Adam	41.6091
2019 - 2024	FFNN	100	10	16	Adam	162.7069
2019 - 2024	FFNN	100	10	32	Adam	271.1802
2019 - 2024	FFNN	100	10	64	Adam	493.5819
2019 - 2024	FFNN	100	25	4	Adam	31.2587
2019 - 2024	FFNN	100	25	8	Adam	31.2634
2019 - 2024	FFNN	100	25	16	Adam	70.8460
2019 - 2024	FFNN	100	25	32	Adam	100.0284
2019 - 2024	FFNN	100	25	64	Adam	393.2109
2019 - 2024	FFNN	100	50	4	Adam	26.0241

2019 - 2024	FFNN	100	50	8	Adam	23.3987
2019 - 2024	FFNN	100	50	16	Adam	22.7946
2019 - 2024	FFNN	100	50	32	Adam	33.4179
2019 - 2024	FFNN	100	50	64	Adam	109.6446
2019 - 2024	FFNN	100	100	4	Adam	24.9113
2019 - 2024	FFNN	100	100	8	Adam	21.0402
2019 - 2024	FFNN	100	100	16	Adam	22.4105
2019 - 2024	FFNN	100	100	32	Adam	26.5564
2019 - 2024	FFNN	100	100	64	Adam	267.2583
2019 - 2024	FFNN	100	200	4	Adam	21.2775
2019 - 2024	FFNN	100	200	8	Adam	21.4735
2019 - 2024	FFNN	100	200	16	Adam	22.2401
2019 - 2024	FFNN	100	200	32	Adam	23.6433
2019 - 2024	FFNN	100	200	64	Adam	138.8791
2019 - 2024	FFNN	100	10	4	Nadam	44.8069
2019 - 2024	FFNN	100	10	8	Nadam	53.0146
2019 - 2024	FFNN	100	10	16	Nadam	245.2460
2019 - 2024	FFNN	100	10	32	Nadam	403.1480
2019 - 2024	FFNN	100	10	64	Nadam	181.3206
2019 - 2024	FFNN	100	25	4	Nadam	25.4914
2019 - 2024	FFNN	100	25	8	Nadam	57.7764
2019 - 2024	FFNN	100	25	16	Nadam	61.8900
2019 - 2024	FFNN	100	25	32	Nadam	59.6478
2019 - 2024	FFNN	100	25	64	Nadam	217.5299
2019 - 2024	FFNN	100	50	4	Nadam	23.6364
2019 - 2024	FFNN	100	50	8	Nadam	24.6795
2019 - 2024	FFNN	100	50	16	Nadam	28.8628
2019 - 2024	FFNN	100	50	32	Nadam	41.9280
2019 - 2024	FFNN	100	50	64	Nadam	73.5833
2019 - 2024	FFNN	100	100	4	Nadam	23.2572
2019 - 2024	FFNN	100	100	8	Nadam	22.0371
2019 - 2024	FFNN	100	100	16	Nadam	24.0490
2019 - 2024	FFNN	100	100	32	Nadam	26.2833
2019 - 2024	FFNN	100	100	64	Nadam	40.6480
2019 - 2024	FFNN	100	200	4	Nadam	22.6154
2019 - 2024	FFNN	100	200	8	Nadam	21.4290
2019 - 2024	FFNN	100	200	16	Nadam	20.2425
2019 - 2024	FFNN	100	200	32	Nadam	22.0212
2019 - 2024	FFNN	100	200	64	Nadam	243.0055

2019 - 2024	FFNN	100	10	4	RMSProp	49.4486
2019 - 2024	FFNN	100	10	8	RMSProp	50.2239
2019 - 2024	FFNN	100	10	16	RMSProp	41.2561
2019 - 2024	FFNN	100	10	32	RMSProp	107.3736
2019 - 2024	FFNN	100	10	64	RMSProp	186.7622
2019 - 2024	FFNN	100	25	4	RMSProp	26.9786
2019 - 2024	FFNN	100	25	8	RMSProp	38.5594
2019 - 2024	FFNN	100	25	16	RMSProp	26.2076
2019 - 2024	FFNN	100	25	32	RMSProp	64.1229
2019 - 2024	FFNN	100	25	64	RMSProp	33.1151
2019 - 2024	FFNN	100	50	4	RMSProp	23.1532
2019 - 2024	FFNN	100	50	8	RMSProp	21.7711
2019 - 2024	FFNN	100	50	16	RMSProp	25.7867
2019 - 2024	FFNN	100	50	32	RMSProp	25.0614
2019 - 2024	FFNN	100	50	64	RMSProp	33.4518
2019 - 2024	FFNN	100	100	4	RMSProp	26.8401
2019 - 2024	FFNN	100	100	8	RMSProp	20.5546
2019 - 2024	FFNN	100	100	16	RMSProp	20.9754
2019 - 2024	FFNN	100	100	32	RMSProp	23.3145
2019 - 2024	FFNN	100	100	64	RMSProp	26.7971
2019 - 2024	FFNN	100	200	4	RMSProp	22.7248
2019 - 2024	FFNN	100	200	8	RMSProp	28.4521
2019 - 2024	FFNN	100	200	16	RMSProp	22.2421
2019 - 2024	FFNN	100	200	32	RMSProp	22.1167
2019 - 2024	FFNN	100	200	64	RMSProp	32.1250

RMSE	MAPE	R- Square	
5.4172	0.0197	0.9508	
8.2371	0.0308	0.8862	
9.6353	0.0351	0.8443	
8.4573	0.0306	0.8801	
12.4845	0.0452	0.7387	
3.8587	0.0143	0.9750	
4.5361	0.0182	0.9655	
6.0438	0.0221	0.9388	
5.7882	0.0222	0.9438	
7.4406	0.0271	0.9072	
3.9101	0.0146	0.9744	
4.0264	0.0148	0.9728	
4.1696	0.0158	0.9708	
4.1594	0.0154	0.9710	
5.5619	0.0211	0.9481	
4.1744	0.0166	0.9708	
5.2679	0.0205	0.9535	
3.5828	0.0132	0.9785	
3.4724	0.0128	0.9798	
4.1350	0.0154	0.9713	
4.9080	0.0181	0.9596	31/200
4.6085	0.0185	0.9644	4./200
3.3633	0.0126	0.9810	79.0000
4.9357	0.0182	0.9592	52.0000
3.8783	0.0142	0.9748	103.0000
5.1927	0.0195	0.9548	
6.1393	0.0224	0.9368	
7.6343	0.0276	0.9023	
7.5060	0.0272	0.9055	
10.0889	0.0364	0.8293	
3.9985	0.0149	0.9737	
4.3631	0.0169	0.9687	
4.7323	0.0173	0.9632	
5.4660	0.0206	0.9509	
5.6068	0.0220	0.9483	
4.5879	0.0178	0.9654	31/50
5.0041	0.0197	0.9588	29/50
4.2299	0.0163	0.9706	49/50

5.3217	0.0204	0.9534	42/50
6.1407	0.0234	0.9380	46/50
5.2608	0.0187	0.9545	38/100
3.7048	0.0146	0.9774	64/100
4.9971	0.0184	0.9589	39/100
3.7075	0.0142	0.9774	93/100
5.1451	0.0193	0.9565	69/100
4.2508	0.0163	0.9703	33/200
3.9180	0.0155	0.0975	46/200
3.3971	0.0124	0.9810	71/200
4.5815	0.0174	0.9655	75/200
5.7171	0.0219	0.9462	54/200
5.6385	0.0212	0.9477	
5.5715	0.0211	0.9489	
7.6375	0.0281	0.9041	
6.0318	0.0227	0.9402	
11.6118	0.0422	0.7782	
3.9921	0.0150	0.9738	
4.5654	0.0168	0.9657	
4.5273	0.0168	0.9663	
4.8916	0.0195	0.9606	
5.7194	0.0233	0.9462	
3.8054	0.0149	0.9762	
3.7432	0.0145	0.9770	
4.2717	0.0164	0.9700	39/50
3.9324	0.0151	0.9746	
4.5940	0.0181	0.9653	
3.6263	0.0140	0.9784	42/100
3.6639	0.0136	0.9779	41/100
3.9945	0.0157	0.9732	90/100
4.0737	0.0158	0.9727	67/100
3.7173	0.1380	0.9773	100/100
4.1949	0.0164	0.9711	36/200
3.5583	0.0137	0.9792	59/200
4.2137	0.0163	0.9708	43/200
4.0669	0.0152	0.9728	
4.2295	0.0160	0.9705	
4.7876	0.0182	0.9616	
4.1816	0.0162	0.9707	
4.6279	0.0175	0.9641	

4.5393	0.0169	0.9655	
7.0577	0.0252	0.9165	
3.9945	0.0157	0.9732	
4.3185	0.0169	0.9687	
5.3985	0.0196	0.9511	
4.0574	0.0160	0.9724	
4.6476	0.0175	0.9638	
4.1253	0.0162	0.9715	
4.2488	0.0164	0.9697	
3.9130	0.0148	0.9743	
4.3211	0.0162	0.9687	
4.2402	0.0165	0.9699	
5.2073	0.0204	0.9545	
4.8245	0.0181	0.9610	
4.1003	0.0162	0.9718	
3.8088	0.0151	0.9757	
3.6426	0.0140	0.9778	
4.2281	0.0173	0.9700	
5.0850	0.0189	0.9566	27/200
4.2201	0.0159	0.9701	28.0000
5.4067	0.0195	0.9510	33.0000
3.9226	0.0151	0.9742	77.0000
4.3050	0.0162	0.9689	
5.3379	0.0191	0.9522	
4.2132	0.0163	0.9702	
4.5544	0.0174	0.9652	
6.9339	0.0251	0.9194	
4.6860	0.0195	0.9639	
3.8757	0.0154	0.9753	
4.9502	0.0182	0.9597	
3.8100	0.0144	0.9761	
5.0147	0.0183	0.9586	
4.5898	0.0175	0.9653	28/50
4.4724	0.0184	0.9671	30/50
4.5050	0.0168	0.9666	
3.9098	0.0152	0.9749	
3.9926	0.0152	0.9738	
4.4977	0.0165	0.9667	25/100
4.5092	0.0172	0.9666	27/100

3.8925	0.0155	0.9751	35/100
4.2868	0.0164	0.9698	44/100
4.2747	0.0162	0.9699	43/100
4.9129	0.0178	0.9603	28/200
4.3967	0.0172	0.9682	29/200
3.9220	0.0152	0.9747	75/200
3.9487	0.0161	0.9744	57/200
4.1751	0.0157	0.9713	42/200
4.2866	0.0163	0.9698	
4.2979	0.0167	0.9696	
4.2229	0.0167	0.9707	
4.2775	0.0165	0.9699	
5.5204	0.0222	0.9499	
4.7853	0.0180	0.9623	23/25
4.0045	0.0157	0.9736	25/25
4.7839	0.0177	0.9624	25/25
4.0404	0.0149	0.9731	25/25
4.0549	0.0151	0.9730	25/25
4.5583	0.0176	0.9658	23/50
4.4381	0.0184	0.9676	34/50
3.6219	0.0142	0.9784	38/50
3.7299	0.0145	0.9771	
3.9038	0.0155	0.9749	
4.7023	0.0184	0.9636	22/100
4.6956	0.0180	0.9637	25/100
3.9544	0.0159	0.9743	50/100
3.4690	0.0135	0.9802	69/100
3.6657	0.0141	0.9779	55/100
5.5242	0.0200	0.9498	31/200
4.4188	0.0180	0.9679	48/200
4.5644	0.0179	0.9657	30/200
3.4310	0.0131	0.9806	55/200
3.9609	0.0150	0.9742	71/200
6.5605	0.0260	0.9278	
6.9814	0.0254	0.9183	
7.2988	0.0275	0.9107	
6.6711	0.0272	0.9254	
6.1906	0.0234	0.9357	
5.3175	0.0203	0.9526	
4.8906	0.0183	0.9599	

5.3244	0.0204	0.9525	
5.9942	0.0231	0.9398	
12.9530	0.0488	0.7187	
5.4121	0.0201	0.9509	
5.8268	0.0211	0.9431	
4.9211	0.0182	0.9594	
5.0474	0.0188	0.9573	
5.6527	0.0209	0.9464	
5.1756	0.0194	0.9551	
5.6963	0.0220	0.9456	
5.6377	0.0216	0.9467	
5.3854	0.0199	0.9514	
5.3402	0.0202	0.9522	
5.9704	0.0226	0.9402	
5.4303	0.0204	0.9506	50/200
5.2661	0.0196	0.9535	38.0000
5.5221	0.0214	0.9489	66.0000
4.9963	0.0189	0.9581	90.0000
5.4686	0.0204	0.9499	
5.9243	0.0227	0.9412	
5.7781	0.0224	0.9440	
6.5812	0.0261	0.9274	
8.4370	0.0309	0.8806	
4.9745	0.0188	0.9593	
5.2239	0.0193	0.9551	
5.3403	0.0199	0.9531	
5.8550	0.0227	0.9436	
7.8010	0.0304	0.8999	
4.9359	0.0178	0.9599	
5.1820	0.0192	0.9558	37/50
4.9476	0.0188	0.9597	
6.0494	0.0223	0.9398	
6.2084	0.0239	0.9366	41/50
5.3784	0.0195	0.9524	63/100
5.7167	0.0222	0.9462	29/100
4.9173	0.0184	0.9602	68/100
5.1970	0.0205	0.9556	47/100
5.8230	0.0228	0.9442	0.5500
6.1276	0.0235	0.9382	27/200

5.6075	0.0218	0.9483	33/200
5.2719	0.0198	0.9543	63/200
5.1088	0.0189	0.9571	57/200
5.1951	0.0193	0.9556	75/200
6.2297	0.0238	0.9362	
7.8046	0.0268	0.8998	
7.6560	0.0294	0.9036	
8.3632	0.0333	0.8850	
10.0938	0.0393	0.8324	
6.8971	0.0276	0.9218	
5.2714	0.0192	0.9543	
5.7497	0.0205	0.9456	
5.9420	0.0229	0.9419	
5.7695	0.0224	0.9452	
6.3810	0.0229	0.9330	32/50
6.0086	0.0230	0.9406	32/50
5.7449	0.0213	0.9494	48/50
5.6082	0.0206	0.9483	
6.4125	0.0232	0.9324	
5.4095	0.0202	0.9519	55/100
5.1397	0.0194	0.9565	30/100
5.6630	0.0213	0.9472	32/100
4.8715	0.0184	0.9610	73/100
6.7906	0.0266	0.9242	50/100
5.1532	0.0194	0.9563	31/200
5.6879	0.0212	0.9468	44/200
5.6556	0.0212	0.9474	45/200
5.5039	0.0207	0.9502	
5.6570	0.0221	0.9474	43/200
8.5638	0.0329	0.8770	
6.4505	0.0244	0.9302	
12.7557	0.0477	0.7272	
16.4676	0.0601	0.5453	
22.2167	0.0824	0.1724	
5.5909	0.0216	0.9476	
5.5914	0.0219	0.9476	
8.4170	0.0350	0.8812	
10.0014	0.0372	0.8323	
19.8295	0.0786	0.3407	
5.1014	0.0190	0.9564	

4.8372	0.0184	0.9608	
4.7744	0.0179	0.9618	
5.7808	0.0225	0.9440	
10.4711	0.0387	0.8162	
4.9911	0.0191	0.9582	
4.5870	0.0171	0.9647	
4.7340	0.0177	0.9624	
5.1533	0.0189	0.9555	
16.3480	0.5920	0.5519	
4.6128	0.0172	0.9643	
4.6339	0.0172	0.9640	76/200
4.7159	0.0177	0.9627	89.0000
4.8624	0.0182	0.9604	109.0000
11.7847	0.0462	0.7671	22.0000
6.6938	0.0266	0.9249	
7.2811	0.0290	0.9111	
15.6603	0.0597	0.5888	
20.0785	0.0811	0.3240	
13.4655	0.0499	0.6960	
5.0489	0.0191	0.9581	
7.6011	0.0280	0.9050	
7.8670	0.0292	0.8982	
7.7232	0.0289	0.9019	
14.7489	0.0568	0.6422	
4.86+17	0.0186	0.0911	
4.9679	0.0191	0.9594	
5.3724	0.0205	0.9525	
6.4752	0.0234	0.9310	
8.5781	0.0320	0.8790	
4.8226	0.0183	0.9617	58/100
4.6944	0.0175	0.9638	68/100
4.9040	0.0185	0.9604	74/100
5.1267	0.0190	0.9568	100/100
6.3756	0.0238	0.9331	68/100
4.7556	0.0182	0.9628	84/200
4.6291	0.0173	0.9648	110/200
4.4992	0.0170	0.9667	114/200
4.6927	0.0177	0.9638	131/200
15.5886	0.0583	0.6003	22/200

7.0320	0.0274	0.9187	
7.0869	0.0284	0.9174	
6.4231	0.0251	0.9321	
10.3621	0.0382	0.8234	
13.6661	0.0575	0.6928	
5.1941	0.0202	0.9556	
6.2096	0.0236	0.9366	
5.1193	0.0200	0.9569	
8.0077	0.0308	0.8945	
5.7546	0.0228	0.9455	
4.8118	0.0179	0.9619	
4.6659	0.0177	0.9642	49/50
5.0781	0.0194	0.9576	
5.0061	0.0186	0.9588	
5.7838	0.0223	0.9450	
5.1807	0.0204	0.9559	50/100
4.5337	0.0169	0.9662	78/100
4.5799	0.0169	0.9655	100/100
4.8285	0.0181	0.9617	100/100
5.1766	0.0198	0.9559	91/100
4.7670	0.0180	0.9626	43/200
5.3341	0.0201	0.9532	0.1750
4.7162	0.0177	0.9634	82/200
4.7028	0.0177	0.9636	99/200
5.6679	0.0218	0.9472	57/200

Apple

LSTM	100	100	16	RMSProp	15.9560	3.9945	0.0157
LSTM	100	100	32	RMSProp	16.5954	4.0737	0.0158
GRU	100	100	16	RMSProp	15.6376	3.9544	0.0159
GRU	100	100	32	RMSProp	12.0337	3.4690	0.0135

Google

LSTM	100	100	16	RMSProp	11.4412	3.3825	0.0148
LSTM	100	100	32	RMSProp	11.2018	3.3469	0.0148
GRU	100	100	16	RMSProp	10.3590	3.2185	0.0139
GRU	100	100	32	RMSProp	9.3436	3.0567	0.0133

Telsa

LSTM	100	100	16	RMSProp	107.2788	10.3575	0.0300
LSTM	100	100	32	RMSProp	102.2892	10.1138	0.0294
GRU	100	100	16	RMSProp	98.5892	9.9292	0.0284
GRU	100	100	32	RMSProp	105.5836	10.2754	0.0297

0.9732	90/100	CNN	100	100	16	RMSProp	32.0699
0.9727	67/100	CNN	100	100	32	RMSProp	23.7318
0.9743	50/100	FFNN	100	100	16	RMSProp	20.9754
0.9802	69/100	FFNN	100	100	32	RMSProp	23.3145

0.9632	71/100	CNN	100	100	16	RMSProp	28.4346
0.9639	100/100	CNN	100	100	32	RMSProp	34.9162
0.9666	39/100	FFNN	100	100	16	RMSProp	28.8550
0.9699	76/100	FFNN	100	100	32	RMSProp	26.5719

0.9754	67	CNN	100	100	16	RMSProp	221.8558
0.9765	100	CNN	100	100	32	RMSProp	223.1333
0.9774	73/100	FFNN	100	100	16	RMSProp	183.2663
0.9758	51/100	FFNN	100	100	32	RMSProp	201.4211

5.6630	0.0213	0.9472	32/100
4.8715	0.0184	0.9610	73/100
4.5799	0.0169	0.9655	100/100
4.8285	0.0181	0.9617	100/100

5.3324	0.0258	0.9085	37/100
5.9090	0.0287	0.8876	42/100
5.3717	0.0258	0.9071	43/100
5.1548	0.0245	0.9145	54/100

14.8948	0.0484	0.9491	100/100
14.9376	0.0463	0.9488	61/100
13.5376	0.0419	0.9580	100/100
14.1923	0.0436	0.9538	73/100

Time Period	Algorithm	Time Stamp	Epochs	Batch Size	Optimiser
2019 - 2024	LSTM	100	10	4	Adam
2019 - 2024	LSTM	100	10	8	Adam
2019 - 2024	LSTM	100	10	16	Adam
2019 - 2024	LSTM	100	10	32	Adam
2019 - 2024	LSTM	100	10	64	Adam
2019 - 2024	LSTM	100	25	4	Adam
2019 - 2024	LSTM	100	25	8	Adam
2019 - 2024	LSTM	100	25	16	Adam
2019 - 2024	LSTM	100	25	32	Adam
2019 - 2024	LSTM	100	25	64	Adam
2019 - 2024	LSTM	100	50	4	Adam
2019 - 2024	LSTM	100	50	8	Adam
2019 - 2024	LSTM	100	50	16	Adam
2019 - 2024	LSTM	100	50	32	Adam
2019 - 2024	LSTM	100	50	64	Adam
2019 - 2024	LSTM	100	100	4	Adam
2019 - 2024	LSTM	100	100	8	Adam
2019 - 2024	LSTM	100	100	16	Adam
2019 - 2024	LSTM	100	100	32	Adam
2019 - 2024	LSTM	100	100	64	Adam
2019 - 2024	LSTM	100	200	4	Adam
2019 - 2024	LSTM	100	200	8	Adam
2019 - 2024	LSTM	100	200	16	Adam
2019 - 2024	LSTM	100	200	32	Adam
2019 - 2024	LSTM	100	200	64	Adam
2019 - 2024	LSTM	100	10	4	Nadam
2019 - 2024	LSTM	100	10	8	Nadam
2019 - 2024	LSTM	100	10	16	Nadam
2019 - 2024	LSTM	100	10	32	Nadam
2019 - 2024	LSTM	100	10	64	Nadam
2019 - 2024	LSTM	100	25	4	Nadam
2019 - 2024	LSTM	100	25	8	Nadam
2019 - 2024	LSTM	100	25	16	Nadam
2019 - 2024	LSTM	100	25	32	Nadam
2019 - 2024	LSTM	100	25	64	Nadam
2019 - 2024	LSTM	100	50	4	Nadam
2019 - 2024	LSTM	100	50	8	Nadam
2019 - 2024	LSTM	100	50	16	Nadam
2019 - 2024	LSTM	100	50	32	Nadam
2019 - 2024	LSTM	100	50	64	Nadam
2019 - 2024	LSTM	100	100	4	Nadam

2019 - 2024	LSTM	100	100	8	Nadam
2019 - 2024	LSTM	100	100	16	Nadam
2019 - 2024	LSTM	100	100	32	Nadam
2019 - 2024	LSTM	100	100	64	Nadam
2019 - 2024	LSTM	100	200	4	Nadam
2019 - 2024	LSTM	100	200	8	Nadam
2019 - 2024	LSTM	100	200	16	Nadam
2019 - 2024	LSTM	100	200	32	Nadam
2019 - 2024	LSTM	100	200	64	Nadam
2019 - 2024	LSTM	100	10	4	RMSProp
2019 - 2024	LSTM	100	10	8	RMSProp
2019 - 2024	LSTM	100	10	16	RMSProp
2019 - 2024	LSTM	100	10	32	RMSProp
2019 - 2024	LSTM	100	10	64	RMSProp
2019 - 2024	LSTM	100	25	4	RMSProp
2019 - 2024	LSTM	100	25	8	RMSProp
2019 - 2024	LSTM	100	25	16	RMSProp
2019 - 2024	LSTM	100	25	32	RMSProp
2019 - 2024	LSTM	100	25	64	RMSProp
2019 - 2024	LSTM	100	50	4	RMSProp
2019 - 2024	LSTM	100	50	8	RMSProp
2019 - 2024	LSTM	100	50	16	RMSProp
2019 - 2024	LSTM	100	50	32	RMSProp
2019 - 2024	LSTM	100	50	64	RMSProp
2019 - 2024	LSTM	100	100	4	RMSProp
2019 - 2024	LSTM	100	100	8	RMSProp
2019 - 2024	LSTM	100	100	16	RMSProp
2019 - 2024	LSTM	100	100	32	RMSProp
2019 - 2024	LSTM	100	100	64	RMSProp
2019 - 2024	LSTM	100	200	4	RMSProp
2019 - 2024	LSTM	100	200	8	RMSProp
2019 - 2024	LSTM	100	200	16	RMSProp
2019 - 2024	LSTM	100	200	32	RMSProp
2019 - 2024	LSTM	100	200	64	RMSProp
2019 - 2024	GRU	100	10	4	Adam
2019 - 2024	GRU	100	10	8	Adam
2019 - 2024	GRU	100	10	16	Adam
2019 - 2024	GRU	100	10	32	Adam
2019 - 2024	GRU	100	10	64	Adam
2019 - 2024	GRU	100	25	4	Adam
2019 - 2024	GRU	100	25	8	Adam
2019 - 2024	GRU	100	25	16	Adam
2019 - 2024	GRU	100	25	32	Adam

2019 - 2024	GRU	100	25	64	Adam
2019 - 2024	GRU	100	50	4	Adam
2019 - 2024	GRU	100	50	8	Adam
2019 - 2024	GRU	100	50	16	Adam
2019 - 2024	GRU	100	50	32	Adam
2019 - 2024	GRU	100	50	64	Adam
2019 - 2024	GRU	100	100	4	Adam
2019 - 2024	GRU	100	100	8	Adam
2019 - 2024	GRU	100	100	16	Adam
2019 - 2024	GRU	100	100	32	Adam
2019 - 2024	GRU	100	100	64	Adam
2019 - 2024	GRU	100	200	4	Adam
2019 - 2024	GRU	100	200	8	Adam
2019 - 2024	GRU	100	200	16	Adam
2019 - 2024	GRU	100	200	32	Adam
2019 - 2024	GRU	100	200	64	Adam
2019 - 2024	GRU	100	10	4	Nadam
2019 - 2024	GRU	100	10	8	Nadam
2019 - 2024	GRU	100	10	16	Nadam
2019 - 2024	GRU	100	10	32	Nadam
2019 - 2024	GRU	100	10	64	Nadam
2019 - 2024	GRU	100	25	4	Nadam
2019 - 2024	GRU	100	25	8	Nadam
2019 - 2024	GRU	100	25	16	Nadam
2019 - 2024	GRU	100	25	32	Nadam
2019 - 2024	GRU	100	25	64	Nadam
2019 - 2024	GRU	100	50	4	Nadam
2019 - 2024	GRU	100	50	8	Nadam
2019 - 2024	GRU	100	50	16	Nadam
2019 - 2024	GRU	100	50	32	Nadam
2019 - 2024	GRU	100	50	64	Nadam
2019 - 2024	GRU	100	100	4	Nadam
2019 - 2024	GRU	100	100	8	Nadam
2019 - 2024	GRU	100	100	16	Nadam
2019 - 2024	GRU	100	100	32	Nadam
2019 - 2024	GRU	100	100	64	Nadam
2019 - 2024	GRU	100	200	4	Nadam
2019 - 2024	GRU	100	200	8	Nadam
2019 - 2024	GRU	100	200	16	Nadam
2019 - 2024	GRU	100	200	32	Nadam
2019 - 2024	GRU	100	200	64	Nadam

2019 - 2024	GRU	100	10	4	RMSProp
2019 - 2024	GRU	100	10	8	RMSProp
2019 - 2024	GRU	100	10	16	RMSProp
2019 - 2024	GRU	100	10	32	RMSProp
2019 - 2024	GRU	100	10	64	RMSProp
2019 - 2024	GRU	100	25	4	RMSProp
2019 - 2024	GRU	100	25	8	RMSProp
2019 - 2024	GRU	100	25	16	RMSProp
2019 - 2024	GRU	100	25	32	RMSProp
2019 - 2024	GRU	100	25	64	RMSProp
2019 - 2024	GRU	100	50	4	RMSProp
2019 - 2024	GRU	100	50	8	RMSProp
2019 - 2024	GRU	100	50	16	RMSProp
2019 - 2024	GRU	100	50	32	RMSProp
2019 - 2024	GRU	100	50	64	RMSProp
2019 - 2024	GRU	100	100	4	RMSProp
2019 - 2024	GRU	100	100	8	RMSProp
2019 - 2024	GRU	100	100	16	RMSProp
2019 - 2024	GRU	100	100	32	RMSProp
2019 - 2024	GRU	100	100	64	RMSProp
2019 - 2024	GRU	100	200	4	RMSProp
2019 - 2024	GRU	100	200	8	RMSProp
2019 - 2024	GRU	100	200	16	RMSProp
2019 - 2024	GRU	100	200	32	RMSProp
2019 - 2024	GRU	100	200	64	RMSProp
2019 - 2024	CNN	100	10	4	Adam
2019 - 2024	CNN	100	10	8	Adam
2019 - 2024	CNN	100	10	16	Adam
2019 - 2024	CNN	100	10	32	Adam
2019 - 2024	CNN	100	10	64	Adam
2019 - 2024	CNN	100	25	4	Adam
2019 - 2024	CNN	100	25	8	Adam
2019 - 2024	CNN	100	25	16	Adam
2019 - 2024	CNN	100	25	32	Adam
2019 - 2024	CNN	100	25	64	Adam
2019 - 2024	CNN	100	50	4	Adam
2019 - 2024	CNN	100	50	8	Adam
2019 - 2024	CNN	100	50	16	Adam
2019 - 2024	CNN	100	50	32	Adam
2019 - 2024	CNN	100	50	64	Adam
2019 - 2024	CNN	100	100	4	Adam
2019 - 2024	CNN	100	100	8	Adam
2019 - 2024	CNN	100	100	16	Adam

2019 - 2024	CNN	100	100	32	Adam
2019 - 2024	CNN	100	100	64	Adam
2019 - 2024	CNN	100	200	4	Adam
2019 - 2024	CNN	100	200	8	Adam
2019 - 2024	CNN	100	200	16	Adam
2019 - 2024	CNN	100	200	32	Adam
2019 - 2024	CNN	100	200	64	Adam
2019 - 2024	CNN	100	10	4	Nadam
2019 - 2024	CNN	100	10	8	Nadam
2019 - 2024	CNN	100	10	16	Nadam
2019 - 2024	CNN	100	10	32	Nadam
2019 - 2024	CNN	100	10	64	Nadam
2019 - 2024	CNN	100	25	4	Nadam
2019 - 2024	CNN	100	25	8	Nadam
2019 - 2024	CNN	100	25	16	Nadam
2019 - 2024	CNN	100	25	32	Nadam
2019 - 2024	CNN	100	25	64	Nadam
2019 - 2024	CNN	100	50	4	Nadam
2019 - 2024	CNN	100	50	8	Nadam
2019 - 2024	CNN	100	50	16	Nadam
2019 - 2024	CNN	100	50	32	Nadam
2019 - 2024	CNN	100	50	64	Nadam
2019 - 2024	CNN	100	100	4	Nadam
2019 - 2024	CNN	100	100	8	Nadam
2019 - 2024	CNN	100	100	16	Nadam
2019 - 2024	CNN	100	100	32	Nadam
2019 - 2024	CNN	100	100	64	Nadam
2019 - 2024	CNN	100	200	4	Nadam
2019 - 2024	CNN	100	200	8	Nadam
2019 - 2024	CNN	100	200	16	Nadam
2019 - 2024	CNN	100	200	32	Nadam
2019 - 2024	CNN	100	200	64	Nadam
2019 - 2024	CNN	100	10	4	RMSProp
2019 - 2024	CNN	100	10	8	RMSProp
2019 - 2024	CNN	100	10	16	RMSProp
2019 - 2024	CNN	100	10	32	RMSProp
2019 - 2024	CNN	100	10	64	RMSProp
2019 - 2024	CNN	100	25	4	RMSProp
2019 - 2024	CNN	100	25	8	RMSProp
2019 - 2024	CNN	100	25	16	RMSProp
2019 - 2024	CNN	100	25	32	RMSProp
2019 - 2024	CNN	100	25	64	RMSProp

2019 - 2024	CNN	100	50	4	RMSProp
2019 - 2024	CNN	100	50	8	RMSProp
2019 - 2024	CNN	100	50	16	RMSProp
2019 - 2024	CNN	100	50	32	RMSProp
2019 - 2024	CNN	100	50	64	RMSProp
2019 - 2024	CNN	100	100	4	RMSProp
2019 - 2024	CNN	100	100	8	RMSProp
2019 - 2024	CNN	100	100	16	RMSProp
2019 - 2024	CNN	100	100	32	RMSProp
2019 - 2024	CNN	100	100	64	RMSProp
2019 - 2024	CNN	100	200	4	RMSProp
2019 - 2024	CNN	100	200	8	RMSProp
2019 - 2024	CNN	100	200	16	RMSProp
2019 - 2024	CNN	100	200	32	RMSProp
2019 - 2024	CNN	100	200	64	RMSProp
2019 - 2024	FFNN	100	10	4	Adam
2019 - 2024	FFNN	100	10	8	Adam
2019 - 2024	FFNN	100	10	16	Adam
2019 - 2024	FFNN	100	10	32	Adam
2019 - 2024	FFNN	100	10	64	Adam
2019 - 2024	FFNN	100	25	4	Adam
2019 - 2024	FFNN	100	25	8	Adam
2019 - 2024	FFNN	100	25	16	Adam
2019 - 2024	FFNN	100	25	32	Adam
2019 - 2024	FFNN	100	25	64	Adam
2019 - 2024	FFNN	100	50	4	Adam
2019 - 2024	FFNN	100	50	8	Adam
2019 - 2024	FFNN	100	50	16	Adam
2019 - 2024	FFNN	100	50	32	Adam
2019 - 2024	FFNN	100	50	64	Adam
2019 - 2024	FFNN	100	100	4	Adam
2019 - 2024	FFNN	100	100	8	Adam
2019 - 2024	FFNN	100	100	16	Adam
2019 - 2024	FFNN	100	100	32	Adam
2019 - 2024	FFNN	100	100	64	Adam
2019 - 2024	FFNN	100	200	4	Adam
2019 - 2024	FFNN	100	200	8	Adam
2019 - 2024	FFNN	100	200	16	Adam
2019 - 2024	FFNN	100	200	32	Adam
2019 - 2024	FFNN	100	200	64	Adam
2019 - 2024	FFNN	100	10	4	Nadam
2019 - 2024	FFNN	100	10	8	Nadam

2019 - 2024	FFNN	100	10	16	Nadam
2019 - 2024	FFNN	100	10	32	Nadam
2019 - 2024	FFNN	100	10	64	Nadam
2019 - 2024	FFNN	100	25	4	Nadam
2019 - 2024	FFNN	100	25	8	Nadam
2019 - 2024	FFNN	100	25	16	Nadam
2019 - 2024	FFNN	100	25	32	Nadam
2019 - 2024	FFNN	100	25	64	Nadam
2019 - 2024	FFNN	100	50	4	Nadam
2019 - 2024	FFNN	100	50	8	Nadam
2019 - 2024	FFNN	100	50	16	Nadam
2019 - 2024	FFNN	100	50	32	Nadam
2019 - 2024	FFNN	100	50	64	Nadam
2019 - 2024	FFNN	100	100	4	Nadam
2019 - 2024	FFNN	100	100	8	Nadam
2019 - 2024	FFNN	100	100	16	Nadam
2019 - 2024	FFNN	100	100	32	Nadam
2019 - 2024	FFNN	100	100	64	Nadam
2019 - 2024	FFNN	100	200	4	Nadam
2019 - 2024	FFNN	100	200	8	Nadam
2019 - 2024	FFNN	100	200	16	Nadam
2019 - 2024	FFNN	100	200	32	Nadam
2019 - 2024	FFNN	100	200	64	Nadam
2019 - 2024	FFNN	100	10	4	RMSProp
2019 - 2024	FFNN	100	10	8	RMSProp
2019 - 2024	FFNN	100	10	16	RMSProp
2019 - 2024	FFNN	100	10	32	RMSProp
2019 - 2024	FFNN	100	10	64	RMSProp
2019 - 2024	FFNN	100	25	4	RMSProp
2019 - 2024	FFNN	100	25	8	RMSProp
2019 - 2024	FFNN	100	25	16	RMSProp
2019 - 2024	FFNN	100	25	32	RMSProp
2019 - 2024	FFNN	100	25	64	RMSProp
2019 - 2024	FFNN	100	50	4	RMSProp
2019 - 2024	FFNN	100	50	8	RMSProp
2019 - 2024	FFNN	100	50	16	RMSProp
2019 - 2024	FFNN	100	50	32	RMSProp
2019 - 2024	FFNN	100	50	64	RMSProp
2019 - 2024	FFNN	100	100	4	RMSProp
2019 - 2024	FFNN	100	100	8	RMSProp
2019 - 2024	FFNN	100	100	16	RMSProp
2019 - 2024	FFNN	100	100	32	RMSProp

2019 - 2024	FFNN	100	100	64	RMSProp
2019 - 2024	FFNN	100	200	4	RMSProp
2019 - 2024	FFNN	100	200	8	RMSProp
2019 - 2024	FFNN	100	200	16	RMSProp
2019 - 2024	FFNN	100	200	32	RMSProp
2019 - 2024	FFNN	100	200	64	RMSProp

MSE	RMSE	MAPE	R- Square	Stop
179.7607	13.4075	0.0364	0.9588	10
169.2181	13.0084	0.0384	0.9612	10
196.7168	14.0256	0.0432	0.9549	10
201.6487	14.2003	0.0431	0.9538	10
238.8724	15.4555	0.0470	0.9452	10
108.2853	10.4060	0.0300	0.9752	25
117.8176	10.8544	0.0318	0.9730	25
151.1729	12.2952	0.0361	0.9653	25
161.7634	12.7186	0.0391	0.9629	25
177.0475	13.3059	0.0401	0.9594	25
114.5831	10.7044	0.0289	0.9737	50
107.5145	10.3689	0.0303	0.9753	50
107.9798	10.3913	0.0310	0.9752	50
136.1693	11.6692	0.0346	0.9688	50
161.4047	12.7045	0.0362	0.9630	50
112.2088	10.5929	0.0311	0.9743	44
111.1652	10.5435	0.0301	0.9745	70
111.2009	10.5452	0.0311	0.9745	86
112.0448	10.5851	0.0314	0.9743	92
126.0717	11.2282	0.0332	0.9711	100
107.5561	10.3709	0.0287	0.9753	42
104.7879	10.2366	0.0290	0.9760	74
106.3402	10.3121	0.0299	0.9756	84
110.5687	10.5152	0.0307	0.9746	105
111.8946	10.5780	0.0322	0.9743	128
170.2352	13.0474	0.0373	0.9610	10
169.7423	13.0285	0.0378	0.9611	10
187.5658	13.6955	0.0398	0.9570	10
194.2000	13.9356	0.0437	0.9555	10
239.5706	15.4781	0.0492	0.9451	10
114.7882	10.7139	0.0310	0.9737	25
123.3596	11.1067	0.0312	0.9717	25
135.0793	11.6224	0.0343	0.9690	25
160.5633	12.6714	0.0373	0.9632	25
196.0468	14.0017	0.0415	0.9550	25
139.8211	11.8246	0.0332	0.9679	33
108.6496	10.4235	0.0307	0.9751	50
121.0139	11.0006	0.0319	0.9723	50
130.2816	11.4141	0.0361	0.9701	50
158.9378	12.6071	0.0384	0.9636	50
117.3267	10.8317	0.0307	0.9731	39

103.2241	10.1599	0.0290	0.9763	77
109.4924	10.4639	0.0310	0.9749	65
117.6672	10.8475	0.0330	0.9730	84
122.9829	11.0898	0.0327	0.9718	100
105.1527	10.2544	0.0285	0.9759	63
108.3888	10.4110	0.0291	0.9751	90
110.0273	10.4894	0.0298	0.9748	91
114.3313	10.6926	0.0327	0.9738	120
115.0361	10.7255	0.0318	0.9736	127
172.9338	13.1504	0.0333	0.9603	10
155.8796	12.4852	0.0350	0.9643	10
194.7013	13.9535	0.0453	0.9554	10
225.6291	15.0210	0.0432	0.9483	10
236.0484	15.3639	0.0480	0.9459	10
116.9196	10.8129	0.0305	0.9732	25
116.9350	10.8136	0.0322	0.9732	25
139.4323	11.8081	0.0341	0.9680	25
162.4231	12.7445	0.0353	0.9628	25
175.6184	13.2521	0.0406	0.9597	25
113.4418	10.6509	0.0310	0.9740	49
104.3362	10.2145	0.0295	0.9761	50
111.3286	10.5512	0.0312	0.9745	50
124.9116	11.1764	0.0317	0.9714	50
140.2794	11.8440	0.0340	0.9678	50
102.4369	10.1211	0.0299	0.9765	52
103.1901	10.1583	0.0288	0.9763	66
107.2788	10.3575	0.0300	0.9754	67
102.2892	10.1138	0.0294	0.9765	100
114.9731	10.7226	0.0320	0.9736	100
109.0576	10.4431	0.0295	0.9750	40
105.1102	10.2523	0.0306	0.9759	62
101.6751	10.0834	0.0291	0.9767	90
104.8678	10.2405	0.0292	0.9760	107
108.9575	10.4383	0.0322	0.9750	151
118.0595	10.8655	0.0320	0.9729	10
125.3129	11.1943	0.0315	0.9713	10
137.2165	11.7139	0.0342	0.9685	10
145.9492	12.0809	0.0346	0.9665	10
181.2624	13.4634	0.0389	0.9584	10
108.8711	10.4341	0.0295	0.9750	25
114.8570	10.7171	0.0316	0.9737	25
116.8630	10.8103	0.0313	0.9732	25
109.2868	10.4540	0.0307	0.9749	25

134.0305	11.5772	0.0351	0.9693	25
112.4771	10.6055	0.0308	0.9742	31
101.8324	10.0912	0.0289	0.9766	50
99.7545	9.9877	0.0291	0.9771	50
105.5824	10.2753	0.0299	0.9758	50
116.3750	10.7877	0.0328	0.9733	50
104.0314	10.1996	0.0297	0.9761	39/100
103.2581	10.1616	0.0288	0.9763	54/100
95.7414	9.7848	0.0278	0.9780	84/100
102.7769	10.1379	0.0300	0.9764	81/100
101.8353	10.0913	0.0293	0.9766	100/100
116.2868	10.7836	0.0313	0.9733	31/200
103.1966	10.1586	0.0294	0.9763	48/200
102.3955	10.1191	0.0291	0.9765	69/200
102.3098	10.1148	0.0294	0.9765	96/200
100.1581	10.0079	0.0290	0.9770	188/200
115.0746	10.7273	0.0309	0.9736	45940
120.5971	10.9817	0.0348	0.9723	45940
137.4778	11.7251	0.0343	0.9685	45940
153.3909	12.3851	0.0377	0.9648	45940
163.0417	12.7688	0.0385	0.9626	45940
106.0116	10.2962	0.0298	0.9757	25/25
113.7462	10.6652	0.0311	0.9739	25/25
114.3586	10.6939	0.0307	0.9738	25/25
117.4249	10.8363	0.0318	0.9731	25/25
144.1287	12.0054	0.0361	0.9670	25/25
100.2378	10.0119	0.0282	0.9770	42/50
101.1224	10.0560	0.0298	0.9768	50/50
98.8261	9.9411	0.0289	0.9773	50/50
102.1339	10.1061	0.0300	0.9766	50/50
114.2701	10.6897	0.0322	0.9738	50/50
108.9573	10.4383	0.0284	0.9750	47/100
103.7422	10.1854	0.0293	0.9762	68/100
97.2017	9.8591	0.0280	0.9777	100/100
96.0908	9.8026	0.0283	0.9780	96/100
105.4925	10.2710	0.0297	0.9758	100/100
97.0783	9.8528	0.0281	0.9777	41/200
103.2186	10.1597	0.0286	0.9763	53/200
99.9541	9.9977	0.0284	0.9771	91/200
103.0428	10.1510	0.0292	0.9764	66/200
102.6816	10.1332	0.0295	0.9765	116/200

113.0158	10.6309	0.0311	0.9741	45940
127.0190	11.2703	0.0328	0.9709	45940
131.0192	11.4464	0.0340	0.9700	45940
154.3574	12.4241	0.0377	0.9646	45940
169.8256	13.0317	0.0393	0.9611	45940
112.3335	10.5988	0.0297	0.9742	25/25
108.9496	10.4379	0.0302	0.9750	25/25
104.8532	10.2398	0.0303	0.9760	25/25
133.0686	11.5355	0.0349	0.9695	25/25
126.5795	11.2508	0.0331	0.9710	
106.1489	10.3029	0.0281	0.9757	45/50
103.2883	10.1631	0.0294	0.9763	48/50
107.1102	10.3494	0.0295	0.9754	42/50
104.4562	10.2204	0.0305	0.9760	50/50
111.6429	10.5661	0.0305	0.9744	50/50
104.2508	10.2103	0.0279	0.9761	62/100
103.6734	10.1820	0.0293	0.9762	57/100
98.5892	9.9292	0.0284	0.9774	73/100
105.5836	10.2754	0.0297	0.9758	51/100
99.9145	9.9957	0.0290	0.9771	100/100
113.4651	10.6520	0.0310	0.9740	32/200
112.2419	10.5944	0.0310	0.9743	38/200
98.6937	9.9345	0.0281	0.9774	58/200
100.8827	10.0440	0.0285	0.9769	98/200
102.5263	10.1255	0.0294	0.9765	92/200
241.4058	15.5372	0.0510	0.9446	10
248.6715	15.7693	0.0506	0.9430	10
260.1086	16.1279	0.0548	0.9404	10
336.1070	18.3332	0.0591	0.9229	10
329.7877	18.1601	0.0594	0.9244	10
199.1317	14.1114	0.0433	0.9543	25
197.87.05	14.0666	0.0428	0.9546	25
243.9002	15.6173	0.0511	0.9441	25
222.4156	14.9136	0.0484	0.9490	25
247.8529	15.7433	0.0514	0.9432	25
163.3643	12.7814	0.0429	0.9625	50
166.1645	12.8905	0.0438	0.9619	50
187.3676	13.6882	0.0421	0.9570	50
212.5195	14.5780	0.0466	0.9513	50
257.1517	16.0360	0.0539	0.9410	50
140.0589	11.8346	0.0376	0.9679	100/100
173.2717	13.1633	0.0393	0.9603	64/100
174.8943	13.2248	0.0411	0.9599	87/100

246.4642	15.6992	0.0493	0.9435	57/100
194.6810	13.9528	0.0485	0.9554	100/100
154.1116	12.4142	0.0378	0.9647	74/200
123.9541	11.1335	0.0339	0.9716	154/200
192.9353	13.8901	0.0440	0.9558	72/200
211.6423	14.5479	0.0481	0.9515	120/200
193.7672	13.9200	0.0455	0.9556	105/200
281.6047	16.7811	0.0606	0.9354	10
243.6770	15.6102	0.0519	0.9441	10
295.8853	17.2013	0.0537	0.9322	10
319.8703	17.8849	0.0629	0.9267	10
382.3686	19.5542	0.0579	0.9123	10
206.4324	14.3678	0.0452	0.9527	25
232.1126	15.2352	0.0518	0.9468	25
206.1544	14.3581	0.0449	0.9527	25
232.0076	15.2318	0.0521	0.9468	25
308.1795	17.5550	0.0562	0.9293	25
141.2342	11.8842	0.0364	0.9676	50/50
174.6701	13.2163	0.0432	0.9599	50/50
190.0240	13.7849	0.0433	0.9564	50/50
221.3921	14.8793	0.0474	0.9492	49/50
267.4733	16.3546	0.0514	0.9387	50/50
125.4455	11.2002	0.0354	0.9712	93/100
158.0543	12.5720	0.0393	0.9638	77/100
220.6503	14.8543	0.0486	0.9494	60/100
195.5381	13.9835	0.0457	0.9552	44/100
220.0620	14.8342	0.0502	0.9495	83/100
123.0443	11.0925	0.0346	0.9718	103/200
127.7227	11.3014	0.0352	0.9707	170/200
194.9111	13.9611	0.0458	0.9553	59/200
227.6132	15.0869	0.0494	0.9478	93/200
273.0089	16.5230	0.0535	0.9374	69/200
273.9513	16.5515	0.0540	0.9372	45940
269.7332	16.4236	0.0542	0.9381	45940
281.0584	16.7648	0.0568	0.9356	45940
289.9910	17.0291	0.0562	0.9335	45940
578.4133	24.0502	0.0758	0.8674	45940
221.8351	14.8941	0.0469	0.9491	25/25
214.1826	14.6350	0.4740	0.9509	25/25
257.0386	16.0432	0.0525	0.9410	25/25
237.1007	15.3981	0.0492	0.9456	25/25
254.9522	15.9672	0.0545	0.9415	25/25

163.9398	12.8039	0.0422	0.9624	50/50
207.1605	14.3931	0.0491	0.9525	50/50
181.5747	13.4750	0.0394	0.9584	50/50
232.4487	15.2463	0.0522	0.9467	50/50
249.5141	15.7960	0.0526	0.9428	50/50
180.6947	13.4423	0.0422	0.9586	86/100
179.1900	13.3862	0.0438	0.9589	65/100
221.8558	14.8948	0.0484	0.9491	100/100
223.1333	14.9376	0.0463	0.9488	61/100
233.9506	15.2954	0.0504	0.9464	59/100
195.6584	13.9878	0.0457	0.9551	45/200
165.8566	12.8785	0.0432	0.9620	54/200
179.0775	13.3820	0.0429	0.9589	76/200
284.5444	16.8684	0.0542	0.9348	52/200
268.6083	16.3893	0.0549	0.9384	40/200
387.0653	19.6740	0.0586	0.9112	45940
493.4192	22.2130	0.0607	0.8869	45940
594.9477	24.3915	0.0687	0.8636	10
573.6691	23.9514	0.0735	0.8685	10
883.2154	29.7189	0.0926	0.7975	
221.14.8820	14.8820	0.0447	0.9492	25/25
243.8386	15.6153	0.0473	0.9441	25/25
319.0664	17.8624	0.0561	0.9268	25/25
323.0747	17.9743	0.0527	0.9259	25/25
510.2650	22.5890	0.0639	0.8830	25/25
202.6226	14.2346	0.0469	0.9535	50/50
204.9259	14.3152	0.0464	0.9530	50/50
223.4407	14.9479	0.0461	0.9488	50/50
269.6694	16.4216	0.0474	0.9382	50/50
248.6568	15.7689	0.0482	0.9430	50/50
185.8597	13.6330	0.0420	0.9574	74/200
196.6561	14.0234	0.0443	0.9549	63/100
175.9964	13.2664	0.0410	0.9596	87/100
186.0498	13.6400	0.4240	0.9573	99/100
221.3539	14.8780	0.0423	0.9492	93/100
179.2755	13.3894	0.0415	0.9589	75/200
182.5546	13.5113	0.0417	0.9581	77/200
202.4878	14.2298	0.0441	0.9536	77/200
165.5084	12.8650	0.0385	0.9620	160/200
177.3358	13.3167	0.0397	0.9593	172/200
343.4051	18.5312	0.0603	0.9213	45940
462.8034	21.5129	0.0618	0.8939	45940

634.8980	25.1972	0.0672	0.8544	45940
865.6274	29.4215	0.0777	0.8015	45940
736.0484	27.1302	0.0746	0.8312	45940
253.4185	15.9191	0.0531	0.9419	25/25
234.5661	15.3156	0.0496	0.9462	25/25
225.9413	15.0313	0.0440	0.9482	25/25
333.2650	18.2555	0.0550	0.9236	25/25
540.5583	23.2499	0.0625	0.8760	25/25
199.2550	14.1158	0.0439	0.9543	50/50
198.0130	14.0717	0.0434	0.9546	50/50
199.3472	14.1190	0.0434	0.9543	50/50
241.7978	15.5498	0.0432	0.9446	50/50
315.4801	17.7618	0.0492	0.9277	50/50
166.5650	12.9060	0.0401	0.9618	85/100
182.7380	13.5181	0.0415	0.9581	70/100
177.7072	13.3307	0.0407	0.9593	84/100
242.6792	15.5782	0.0472	0.9444	54/100
250.2369	15.8189	0.0449	0.9426	86/100
166.5182	12.9042	0.0370	0.9618	67/200
178.4550	13.3587	0.0380	0.9591	71/200
167.9793	12.9607	0.0400	0.9615	94/200
178.9516	13.3773	0.0398	0.9590	110/200
164.3451	12.8197	0.0389	0.9623	176/200
395.7022	19.8923	0.0583	0.9093	45940
453.3140	21.2912	0.0592	0.8961	45940
715.4396	26.7477	0.0702	0.8359	
552.2591	23.5002	0.0481	0.8734	45940
704.1410	26.5357	0.0767	0.8385	45940
218.9123	14.7957	0.0443	0.9498	25/25
225.9707	15.0323	0.0469	0.9482	25/25
247.0475	15.7177	0.0498	0.9434	25/25
309.8006	17.6012	0.0497	0.9290	25/25
298.7803	19.9695	0.0591	0.9086	25/25
192.5447	13.8760	0.0429	0.9558	50/50
187.5426	13.6946	0.0393	0.9570	50/50
210.7750	14.5181	0.0444	0.9517	46/50
212.2717	14.5695	0.0444	0.9513	50/50
268.0278	16.3716	0.0487	0.9385	50/50
165.2070	12.8533	0.0381	0.9621	99/100
183.4117	13.5430	0.0397	0.9579	100/100
183.2663	13.5376	0.0419	0.9580	100/100
201.4211	14.1923	0.0436	0.9538	73/100

203.0647	14.2501	0.0434	0.9534	83/100
186.7262	13.6648	0.4290	0.9572	64/200
201.3195	14.1887	0.0422	0.9538	71/200
173.9092	13.1875	0.0409	0.9601	124/200
180.8895	13.4495	0.0415	0.9585	99/200
204.9805	14.3171	0.0452	0.9530	99/200

Time Period	Algorithm	Time Stamp	Epochs	Batch Size	Optimiser	MSE	RMSE
2019 - 2024	LSTM	100	10	4	Adam	20.2870	4.5041
2019 - 2024	LSTM	100	10	8	Adam	19.1450	4.3755
2019 - 2024	LSTM	100	10	16	Adam	27.2918	5.2242
2019 - 2024	LSTM	100	10	32	Adam	48.8492	6.9892
2019 - 2024	LSTM	100	10	64	Adam	36.8049	6.0667
2019 - 2024	LSTM	100	25	4	Adam	20.5029	4.5280
2019 - 2024	LSTM	100	25	8	Adam	14.1695	3.7642
2019 - 2024	LSTM	100	25	16	Adam	18.2969	4.2775
2019 - 2024	LSTM	100	25	32	Adam	26.7868	5.1756
2019 - 2024	LSTM	100	25	64	Adam	41.7051	6.4580
2019 - 2024	LSTM	100	50	4	Adam	11.0151	3.3189
2019 - 2024	LSTM	100	50	8	Adam	12.6584	3.5579
2019 - 2024	LSTM	100	50	16	Adam	12.6539	3.5572
2019 - 2024	LSTM	100	50	32	Adam	13.9349	3.7329
2019 - 2024	LSTM	100	50	64	Adam	32.0810	5.6640
2019 - 2024	LSTM	100	100	4	Adam	17.8216	4.2216
2019 - 2024	LSTM	100	100	8	Adam	11.2099	3.3481
2019 - 2024	LSTM	100	100	16	Adam	9.7696	3.1256
2019 - 2024	LSTM	100	100	32	Adam	18.6933	4.3236
2019 - 2024	LSTM	100	100	64	Adam	27.5942	5.2530
2019 - 2024	LSTM	100	200	4	Adam	15.2852	3.9096
2019 - 2024	LSTM	100	200	8	Adam	16.1337	4.0167
2019 - 2024	LSTM	100	200	16	Adam	18.8407	4.3406
2019 - 2024	LSTM	100	200	32	Adam	29.9132	5.4693
2019 - 2024	LSTM	100	200	64	Adam	18.1433	4.2595
2019 - 2024	LSTM	100	10	4	Nadam	24.9181	4.9918
2019 - 2024	LSTM	100	10	8	Nadam	23.1055	4.8068
2019 - 2024	LSTM	100	10	16	Nadam	49.0203	7.0015
2019 - 2024	LSTM	100	10	32	Nadam	50.9108	7.1352
2019 - 2024	LSTM	100	10	64	Nadam	54.0863	7.3543
2019 - 2024	LSTM	100	25	4	Nadam	16.2381	4.0297
2019 - 2024	LSTM	100	25	8	Nadam	18.6282	4.3160
2019 - 2024	LSTM	100	25	16	Nadam	15.2965	3.9111
2019 - 2024	LSTM	100	25	32	Nadam	19.0200	4.3612
2019 - 2024	LSTM	100	25	64	Nadam	26.5859	5.1562
2019 - 2024	LSTM	100	50	4	Nadam	13.8398	3.7202
2019 - 2024	LSTM	100	50	8	Nadam	13.6848	3.6993

2019 - 2024	LSTM	100	50	16	Nadam	12.1548	3.4864
2019 - 2024	LSTM	100	50	32	Nadam	20.4772	4.5252
2019 - 2024	LSTM	100	50	64	Nadam	33.2185	5.7635
2019 - 2024	LSTM	100	100	4	Nadam	17.2822	4.1572
2019 - 2024	LSTM	100	100	8	Nadam	14.9910	3.8718
2019 - 2024	LSTM	100	100	16	Nadam	12.2240	3.4963
2019 - 2024	LSTM	100	100	32	Nadam	13.1590	3.6275
2019 - 2024	LSTM	100	100	64	Nadam	26.9010	5.1866
2019 - 2024	LSTM	100	200	4	Nadam	12.6361	3.5547
2019 - 2024	LSTM	100	200	8	Nadam	14.4749	3.8046
2019 - 2024	LSTM	100	200	16	Nadam	12.7695	3.5734
2019 - 2024	LSTM	100	200	32	Nadam	19.6441	4.4322
2019 - 2024	LSTM	100	200	64	Nadam	25.4144	5.0413
2019 - 2024	LSTM	100	10	4	RMSProp	19.7985	4.4495
2019 - 2024	LSTM	100	10	8	RMSProp	25.3772	5.0376
2019 - 2024	LSTM	100	10	16	RMSProp	17.6337	4.1993
2019 - 2024	LSTM	100	10	32	RMSProp	31.4020	5.6038
2019 - 2024	LSTM	100	10	64	RMSProp	62.6340	7.9142
2019 - 2024	LSTM	100	25	4	RMSProp	13.0889	3.6179
2019 - 2024	LSTM	100	25	8	RMSProp	19.7223	4.4410
2019 - 2024	LSTM	100	25	16	RMSProp	24.8033	4.9803
2019 - 2024	LSTM	100	25	32	RMSProp	15.2140	3.9005
2019 - 2024	LSTM	100	25	64	RMSProp	22.8049	4.7754
2019 - 2024	LSTM	100	50	4	RMSProp	16.5033	4.0624
2019 - 2024	LSTM	100	50	8	RMSProp	12.3676	3.5168
2019 - 2024	LSTM	100	50	16	RMSProp	11.2876	3.3597
2019 - 2024	LSTM	100	50	32	RMSProp	13.5172	3.6766
2019 - 2024	LSTM	100	50	64	RMSProp	16.4704	4.0584
2019 - 2024	LSTM	100	100	4	RMSProp	15.3431	3.9170
2019 - 2024	LSTM	100	100	8	RMSProp	14.2201	3.7709
2019 - 2024	LSTM	100	100	16	RMSProp	11.4412	3.3825
2019 - 2024	LSTM	100	100	32	RMSProp	11.2018	3.3469
2019 - 2024	LSTM	100	100	64	RMSProp	16.5735	4.0711
2019 - 2024	LSTM	100	200	4	RMSProp	13.5636	3.6829
2019 - 2024	LSTM	100	200	8	RMSProp	11.8111	3.4367
2019 - 2024	LSTM	100	200	16	RMSProp	11.6509	3.4133
2019 - 2024	LSTM	100	200	32	RMSProp	10.0014	3.1625
2019 - 2024	LSTM	100	200	64	RMSProp	11.9916	3.4629
2019 - 2024	GRU	100	10	4	Adam	13.7893	3.7134
2019 - 2024	GRU	100	10	8	Adam	12.5315	3.5400

2019 - 2024	GRU	100	10	16	Adam	14.9961	3.8725
2019 - 2024	GRU	100	10	32	Adam	21.5657	4.6439
2019 - 2024	GRU	100	10	64	Adam	22.3789	4.7306
2019 - 2024	GRU	100	25	4	Adam	14.2111	3.7698
2019 - 2024	GRU	100	25	8	Adam	11.2207	3.3497
2019 - 2024	GRU	100	25	16	Adam	11.6189	3.4086
2019 - 2024	GRU	100	25	32	Adam	13.0820	3.6169
2019 - 2024	GRU	100	25	64	Adam	16.6805	4.0842
2019 - 2024	GRU	100	50	4	Adam	13.5344	3.6789
2019 - 2024	GRU	100	50	8	Adam	10.5090	3.2418
2019 - 2024	GRU	100	50	16	Adam	11.4821	3.3885
2019 - 2024	GRU	100	50	32	Adam	14.3468	3.7877
2019 - 2024	GRU	100	50	64	Adam	11.8951	3.4489
2019 - 2024	GRU	100	100	4	Adam	12.9899	3.6042
2019 - 2024	GRU	100	100	8	Adam	10.2307	3.1985
2019 - 2024	GRU	100	100	16	Adam	10.6860	3.2689
2019 - 2024	GRU	100	100	32	Adam	11.0694	3.3271
2019 - 2024	GRU	100	100	64	Adam	9.2090	3.0346
2019 - 2024	GRU	100	200	4	Adam	11.8721	3.4456
2019 - 2024	GRU	100	200	8	Adam	10.2008	3.1939
2019 - 2024	GRU	100	200	16	Adam	10.7417	3.2774
2019 - 2024	GRU	100	200	32	Adam	9.1368	3.0227
2019 - 2024	GRU	100	200	64	Adam	14.5960	3.8205
2019 - 2024	GRU	100	10	4	Nadam	13.5578	3.6821
2019 - 2024	GRU	100	10	8	Nadam	11.7721	3.4310
2019 - 2024	GRU	100	10	16	Nadam	15.3397	3.9166
2019 - 2024	GRU	100	10	32	Nadam	27.0948	5.2053
2019 - 2024	GRU	100	10	64	Nadam	25.8098	5.0803
2019 - 2024	GRU	100	25	4	Nadam	12.5565	3.5435
2019 - 2024	GRU	100	25	8	Nadam	11.9293	3.4539
2019 - 2024	GRU	100	25	16	Nadam	10.9929	3.3156
2019 - 2024	GRU	100	25	32	Nadam	13.9683	3.7374
2019 - 2024	GRU	100	25	64	Nadam	17.0128	4.1247
2019 - 2024	GRU	100	50	4	Nadam	12.8189	3.5803
2019 - 2024	GRU	100	50	8	Nadam	12.5630	3.5444
2019 - 2024	GRU	100	50	16	Nadam	9.7628	3.1246
2019 - 2024	GRU	100	50	32	Nadam	14.8612	3.8550
2019 - 2024	GRU	100	50	64	Nadam	12.6473	3.5563
2019 - 2024	GRU	100	100	4	Nadam	13.3370	3.6520

2019 - 2024	GRU	100	100	8	Nadam	11.1874	3.3448
2019 - 2024	GRU	100	100	16	Nadam	11.9523	3.4572
2019 - 2024	GRU	100	100	32	Nadam	11.1677	3.3418
2019 - 2024	GRU	100	100	64	Nadam	12.8297	3.5819
2019 - 2024	GRU	100	200	4	Nadam	12.2529	3.5004
2019 - 2024	GRU	100	200	8	Nadam	11.8895	3.4481
2019 - 2024	GRU	100	200	16	Nadam	11.8964	3.4491
2019 - 2024	GRU	100	200	32	Nadam	10.4513	3.2328
2019 - 2024	GRU	100	200	64	Nadam	8.9901	2.9983
2019 - 2024	GRU	100	10	4	RMSProp	13.1327	3.6239
2019 - 2024	GRU	100	10	8	RMSProp	10.8104	3.2879
2019 - 2024	GRU	100	10	16	RMSProp	13.4099	3.6619
2019 - 2024	GRU	100	10	32	RMSProp	14.1645	3.7636
2019 - 2024	GRU	100	10	64	RMSProp	15.7943	3.9742
2019 - 2024	GRU	100	25	4	RMSProp	12.6258	3.5533
2019 - 2024	GRU	100	25	8	RMSProp	11.4526	3.3842
2019 - 2024	GRU	100	25	16	RMSProp	10.5321	3.2453
2019 - 2024	GRU	100	25	32	RMSProp	11.9366	3.4549
2019 - 2024	GRU	100	25	64	RMSProp	11.4442	3.3829
2019 - 2024	GRU	100	50	4	RMSProp	13.9503	3.7350
2019 - 2024	GRU	100	50	8	RMSProp	11.4444	3.3830
2019 - 2024	GRU	100	50	16	RMSProp	10.5449	3.2473
2019 - 2024	GRU	100	50	32	RMSProp	10.2859	3.2072
2019 - 2024	GRU	100	50	64	RMSProp	10.1198	3.1812
2019 - 2024	GRU	100	100	4	RMSProp	13.8341	3.7194
2019 - 2024	GRU	100	100	8	RMSProp	13.1613	3.6279
2019 - 2024	GRU	100	100	16	RMSProp	10.3590	3.2185
2019 - 2024	GRU	100	100	32	RMSProp	9.3436	3.0567
2019 - 2024	GRU	100	100	64	RMSProp	8.8555	2.9758
2019 - 2024	GRU	100	200	4	RMSProp	13.1176	3.6218
2019 - 2024	GRU	100	200	8	RMSProp	13.0104	3.6070
2019 - 2024	GRU	100	200	16	RMSProp	10.0806	3.1750
2019 - 2024	GRU	100	200	32	RMSProp	9.6639	3.1087
2019 - 2024	GRU	100	200	64	RMSProp	9.8580	3.1397
2019 - 2024	CNN	100	10	4	Adam	26.9661	5.1929
2019 - 2024	CNN	100	10	8	Adam	35.6283	5.9689
2019 - 2024	CNN	100	10	16	Adam	40.6727	6.3775
2019 - 2024	CNN	100	10	32	Adam	37.4637	6.1208
2019 - 2024	CNN	100	10	64	Adam	73.1876	8.5550
2019 - 2024	CNN	100	25	4	Adam	27.2612	5.2212

2019 - 2024	CNN	100	25	8	Adam	27.9835	5.2899
2019 - 2024	CNN	100	25	16	Adam	35.6598	5.9716
2019 - 2024	CNN	100	25	32	Adam	38.2340	6.1834
2019 - 2024	CNN	100	25	64	Adam	43.9263	6.6277
2019 - 2024	CNN	100	50	4	Adam	25.2474	5.0247
2019 - 2024	CNN	100	50	8	Adam	25.8040	5.0798
2019 - 2024	CNN	100	50	16	Adam	26.2002	5.1186
2019 - 2024	CNN	100	50	32	Adam	28.5972	5.3476
2019 - 2024	CNN	100	50	64	Adam	30.1471	5.4906
2019 - 2024	CNN	100	100	4	Adam	27.9604	5.2878
2019 - 2024	CNN	100	100	8	Adam	25.3988	5.0397
2019 - 2024	CNN	100	100	16	Adam	28.8700	5.3731
2019 - 2024	CNN	100	100	32	Adam	28.1193	5.3028
2019 - 2024	CNN	100	100	64	Adam	33.8800	5.8207
2019 - 2024	CNN	100	200	4	Adam	24.9367	4.9937
2019 - 2024	CNN	100	200	8	Adam	27.4973	5.2438
2019 - 2024	CNN	100	200	16	Adam	23.7517	4.8736
2019 - 2024	CNN	100	200	32	Adam	28.8779	5.3738
2019 - 2024	CNN	100	200	64	Adam	34.3095	5.8574
2019 - 2024	CNN	100	10	4	Nadam	49.8829	7.0628
2019 - 2024	CNN	100	10	8	Nadam	32.9772	5.7426
2019 - 2024	CNN	100	10	16	Nadam	42.8027	6.5424
2019 - 2024	CNN	100	10	32	Nadam	41.7378	6.4605
2019 - 2024	CNN	100	10	64	Nadam	42.0398	6.4838
2019 - 2024	CNN	100	25	4	Nadam	30.4706	5.5200
2019 - 2024	CNN	100	25	8	Nadam	29.4823	5.4298
2019 - 2024	CNN	100	25	16	Nadam	34.2760	5.8546
2019 - 2024	CNN	100	25	32	Nadam	32.5771	5.7076
2019 - 2024	CNN	100	25	64	Nadam	39.0218	6.2467
2019 - 2024	CNN	100	50	4	Nadam	28.1808	5.3086
2019 - 2024	CNN	100	50	8	Nadam	29.2236	5.4059
2019 - 2024	CNN	100	50	16	Nadam	29.0102	5.3861
2019 - 2024	CNN	100	50	32	Nadam	32.9970	5.7443
2019 - 2024	CNN	100	50	64	Nadam	25.7463	5.0741
2019 - 2024	CNN	100	100	4	Nadam	29.2498	5.4083
2019 - 2024	CNN	100	100	8	Nadam	26.6263	5.1601
2019 - 2024	CNN	100	100	16	Nadam	31.2112	5.5867
2019 - 2024	CNN	100	100	32	Nadam	25.1126	5.0113
2019 - 2024	CNN	100	100	64	Nadam	34.3119	5.8576

2019 - 2024	CNN	100	200	4	Nadam	25.7905	5.0784
2019 - 2024	CNN	100	200	8	Nadam	24.2104	4.9204
2019 - 2024	CNN	100	200	16	Nadam	23.6934	4.8676
2019 - 2024	CNN	100	200	32	Nadam	40.0401	6.3277
2019 - 2024	CNN	100	200	64	Nadam	28.0944	5.3004
2019 - 2024	CNN	100	10	4	RMSProp	26.9112	5.1876
2019 - 2024	CNN	100	10	8	RMSProp	37.6446	6.1355
2019 - 2024	CNN	100	10	16	RMSProp	37.4796	6.1221
2019 - 2024	CNN	100	10	32	RMSProp	40.1941	6.3399
2019 - 2024	CNN	100	10	64	RMSProp	49.4841	7.0345
2019 - 2024	CNN	100	25	4	RMSProp	27.8493	5.2772
2019 - 2024	CNN	100	25	8	RMSProp	25.8517	5.0845
2019 - 2024	CNN	100	25	16	RMSProp	33.9001	5.8224
2019 - 2024	CNN	100	25	32	RMSProp	32.4697	5.6982
2019 - 2024	CNN	100	25	64	RMSProp	36.9487	6.0785
2019 - 2024	CNN	100	50	4	RMSProp	26.3882	5.1369
2019 - 2024	CNN	100	50	8	RMSProp	28.5771	5.3458
2019 - 2024	CNN	100	50	16	RMSProp	29.6721	5.4472
2019 - 2024	CNN	100	50	32	RMSProp	46.8427	6.8442
2019 - 2024	CNN	100	50	64	RMSProp	26.4331	5.1413
2019 - 2024	CNN	100	100	4	RMSProp	25.3561	5.0355
2019 - 2024	CNN	100	100	8	RMSProp	26.8128	5.1781
2019 - 2024	CNN	100	100	16	RMSProp	28.4346	5.3324
2019 - 2024	CNN	100	100	32	RMSProp	34.9162	5.9090
2019 - 2024	CNN	100	100	64	RMSProp	33.9046	5.8228
2019 - 2024	CNN	100	200	4	RMSProp	28.6867	5.3560
2019 - 2024	CNN	100	200	8	RMSProp	23.3435	4.8315
2019 - 2024	CNN	100	200	16	RMSProp	33.3784	5.7774
2019 - 2024	CNN	100	200	32	RMSProp	24.3260	4.9321
2019 - 2024	CNN	100	200	64	RMSProp	35.2264	5.9352
2019 - 2024	FFNN	100	10	4	Adam	174.3652	13.2047
2019 - 2024	FFNN	100	10	8	Adam	52.1904	7.2243
2019 - 2024	FFNN	100	10	16	Adam	184.5274	13.5841
2019 - 2024	FFNN	100	10	32	Adam	156.9833	12.5293
2019 - 2024	FFNN	100	10	64	Adam	199.2947	14.1172
2019 - 2024	FFNN	100	25	4	Adam	25.2796	5.0279
2019 - 2024	FFNN	100	25	8	Adam	59.0358	7.6835
2019 - 2024	FFNN	100	25	16	Adam	51.8137	7.1982
2019 - 2024	FFNN	100	25	32	Adam	62.2341	7.8889
2019 - 2024	FFNN	100	25	64	Adam	270.6998	16.4530

2019 - 2024	FFNN	100	50	4	Adam	26.3682	5.1350
2019 - 2024	FFNN	100	50	8	Adam	23.9427	4.8931
2019 - 2024	FFNN	100	50	16	Adam	26.4190	5.1399
2019 - 2024	FFNN	100	50	32	Adam	26.6244	5.1599
2019 - 2024	FFNN	100	50	64	Adam	40.7383	6.3827
2019 - 2024	FFNN	100	100	4	Adam	23.3128	4.8283
2019 - 2024	FFNN	100	100	8	Adam	20.0894	4.4821
2019 - 2024	FFNN	100	100	16	Adam	21.8102	4.6701
2019 - 2024	FFNN	100	100	32	Adam	23.1118	4.8075
2019 - 2024	FFNN	100	100	64	Adam	132.2057	11.4981
2019 - 2024	FFNN	100	200	4	Adam	27.2316	5.2184
2019 - 2024	FFNN	100	200	8	Adam	22.5691	4.7507
2019 - 2024	FFNN	100	200	16	Adam	23.4071	4.8381
2019 - 2024	FFNN	100	200	32	Adam	20.8826	4.5697
2019 - 2024	FFNN	100	200	64	Adam	169.1302	13.0050
2019 - 2024	FFNN	100	10	4	Nadam	63.2089	7.9504
2019 - 2024	FFNN	100	10	8	Nadam	128.4749	11.3347
2019 - 2024	FFNN	100	10	16	Nadam	191.1191	13.8246
2019 - 2024	FFNN	100	10	32	Nadam	84.4829	9.1915
2019 - 2024	FFNN	100	10	64	Nadam	161.0105	12.6890
2019 - 2024	FFNN	100	25	4	Nadam	28.6571	5.3532
2019 - 2024	FFNN	100	25	8	Nadam	33.6158	5.7979
2019 - 2024	FFNN	100	25	16	Nadam	31.4756	5.6103
2019 - 2024	FFNN	100	25	32	Nadam	59.9784	7.7446
2019 - 2024	FFNN	100	25	64	Nadam	199.7841	14.1345
2019 - 2024	FFNN	100	50	4	Nadam	24.1497	4.9142
2019 - 2024	FFNN	100	50	8	Nadam	24.2416	4.9236
2019 - 2024	FFNN	100	50	16	Nadam	28.5558	5.3438
2019 - 2024	FFNN	100	50	32	Nadam	32.7425	5.7221
2019 - 2024	FFNN	100	50	64	Nadam	164.2758	12.8170
2019 - 2024	FFNN	100	100	4	Nadam	25.0140	5.0014
2019 - 2024	FFNN	100	100	8	Nadam	26.4555	5.1435
2019 - 2024	FFNN	100	100	16	Nadam	21.8263	4.6719
2019 - 2024	FFNN	100	100	32	Nadam	111.6861	10.5682
2019 - 2024	FFNN	100	100	64	Nadam	60.8753	7.8023
2019 - 2024	FFNN	100	200	4	Nadam	30.1958	5.4951
2019 - 2024	FFNN	100	200	8	Nadam	24.3082	4.9303
2019 - 2024	FFNN	100	200	16	Nadam	20.5588	4.5342
2019 - 2024	FFNN	100	200	32	Nadam	106.5444	10.3220
2019 - 2024	FFNN	100	200	64	Nadam	25.2891	5.0288

2019 - 2024	FFNN	100	10	4	RMSProp	85.3331	9.2376
2019 - 2024	FFNN	100	10	8	RMSProp	55.5114	7.4506
2019 - 2024	FFNN	100	10	16	RMSProp	86.0755	9.2777
2019 - 2024	FFNN	100	10	32	RMSProp	68.3660	8.2684
2019 - 2024	FFNN	100	10	64	RMSProp	89.0283	9.4355
2019 - 2024	FFNN	100	25	4	RMSProp	36.0499	6.0042
2019 - 2024	FFNN	100	25	8	RMSProp	30.6410	5.5354
2019 - 2024	FFNN	100	25	16	RMSProp	34.8742	5.9054
2019 - 2024	FFNN	100	25	32	RMSProp	28.7822	5.3649
2019 - 2024	FFNN	100	25	64	RMSProp	39.7596	6.3055
2019 - 2024	FFNN	100	50	4	RMSProp	36.9989	6.0827
2019 - 2024	FFNN	100	50	8	RMSProp	33.0448	5.7485
2019 - 2024	FFNN	100	50	16	RMSProp	30.2988	5.5044
2019 - 2024	FFNN	100	50	32	RMSProp	28.5290	5.3413
2019 - 2024	FFNN	100	50	64	RMSProp	28.1563	5.3063
2019 - 2024	FFNN	100	100	4	RMSProp	34.1794	5.8463
2019 - 2024	FFNN	100	100	8	RMSProp	29.5365	5.4347
2019 - 2024	FFNN	100	100	16	RMSProp	28.8550	5.3717
2019 - 2024	FFNN	100	100	32	RMSProp	26.5719	5.1548
2019 - 2024	FFNN	100	100	64	RMSProp	25.9779	5.0968
2019 - 2024	FFNN	100	200	4	RMSProp	30.0414	5.4810
2019 - 2024	FFNN	100	200	8	RMSProp	31.6498	5.6258
2019 - 2024	FFNN	100	200	16	RMSProp	27.2070	5.2160
2019 - 2024	FFNN	100	200	32	RMSProp	25.2905	5.0290
2019 - 2024	FFNN	100	200	64	RMSProp	25.1873	5.0187

MAPE	R- Square	Stop
0.0202	0.9347	10
0.0202	0.9384	10
0.0242	0.9121	10
0.0332	0.8427	10
0.0280	0.8815	10
0.0206	0.9340	25/25
0.0170	0.9544	25
0.0200	0.9411	25/25
0.0244	0.9138	25/25
0.0309	0.8657	25/25
0.0143	0.9645	39/50
0.0163	0.9592	47/50
0.0160	0.9593	50/50
0.0176	0.9551	50/50
0.0264	0.8967	48/50
0.0195	0.9426	26/100
0.0141	0.9639	62/100
0.0134	0.9685	78/100
0.0197	0.9398	62/100
0.0245	0.9112	41/100
0.0175	0.9508	29/200
0.0182	0.9481	38/200
0.0201	0.9393	37/200
0.0254	0.9037	39/200
0.0199	0.9416	60/200
0.0229	0.9198	10.0000
0.0221	0.9256	10.0000
0.0332	0.8422	10.0000
0.0328	0.8361	10.0000
0.0351	0.8259	10.0000
0.0187	0.9477	25/25
0.0200	0.9400	25/25
0.0178	0.9508	25/25
0.0203	0.9388	25/25
0.0242	0.9144	25/25
0.0168	0.9554	36/50
0.0171	0.9559	33/50

0.0150	0.9609	50/50
0.0215	0.9341	43/50
0.0273	0.8931	47/50
0.0178	0.9444	42/100
0.0168	0.9517	50/100
0.0151	0.9606	76/100
0.0166	0.9576	100/100
0.0242	0.9134	44/100
0.0161	0.9593	34/200
0.0176	0.9534	56/200
0.0154	0.9589	72/200
0.0208	0.9368	42/200
0.0230	0.9182	57/200
0.0202	0.9363	10.0000
0.0232	0.9183	10.0000
0.0193	0.9432	10.0000
0.0255	0.8989	10.0000
0.0364	0.7983	10.0000
0.0162	0.9579	25.0000
0.0200	0.9365	25.0000
0.0235	0.9201	25.0000
0.0181	0.9510	25.0000
0.0219	0.9266	25.0000
0.0174	0.9469	39/50
0.0153	0.9602	50/50
0.0148	0.9637	50/50
0.0171	0.9565	50/50
0.0190	0.9470	50/50
0.0172	0.9506	43/100
0.0164	0.9542	45/100
0.0148	0.9632	71/100
0.0148	0.9639	100/100
0.0193	0.9466	60/100
0.0167	0.9563	43/200
0.0152	0.9620	37/200
0.0154	0.9625	75/200
0.0137	0.9678	114/200
0.0158	0.9614	100/200
0.0163	0.9556	10
0.0160	0.9597	10

0.0181	0.9517	10
0.0209	0.9306	10
0.0221	0.9280	10
0.0157	0.9542	25/25
0.0150	0.9639	25/25
0.0152	0.9626	25/25
0.0162	0.9579	25/25
0.0188	0.9463	25/25
0.0163	0.9564	22/50
0.0143	0.9662	32/50
0.0147	0.9630	49/50
0.0171	0.9538	41/50
0.0153	0.9617	50/50
0.0151	0.9582	32/100
0.0145	0.9671	37/100
0.0146	0.9656	39/100
0.0145	0.9644	43/100
0.0132	0.9704	72/100
0.0152	0.9618	34/200
0.0138	0.9672	45/200
0.0139	0.9654	64/200
0.0130	0.9706	77/200
0.0176	0.9530	34/200
0.0164	0.9564	10.0000
0.0153	0.9621	10.0000
0.0174	0.9506	10.0000
0.0248	0.9128	10.0000
0.0236	0.9169	10.0000
0.0166	0.9596	25/25
0.0151	0.9616	25/25
0.0145	0.9646	25/25
0.0171	0.9550	25/25
0.0194	0.9452	25/25
0.0159	0.9587	25/50
0.0156	0.9596	39/50
0.0135	0.9686	50/50
0.0173	0.9522	37/50
0.0159	0.9593	49/50
0.0162	0.9571	33/100

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0.0145	0.9640	46/100
0.0155	0.9615	36/100
0.0145	0.9640	72/100
0.0161	0.9587	60/100
0.0157	0.9606	31/200
0.0149	0.9617	39/200
0.0152	0.9617	39/200
0.0147	0.9664	69/200
0.0129	0.9711	83/200
0.0157	0.9577	10.0000
0.0145	0.9652	10.0000
0.0163	0.9568	10.0000
0.0175	0.9544	10.0000
0.0181	0.9491	10.0000
0.0157	0.9594	25.0000
0.0148	0.9631	25.0000
0.0141	0.9661	25.0000
0.0155	0.9616	25.0000
0.0151	0.9632	25.0000
0.0169	0.9551	21/50
0.0150	0.9632	28/50
0.0141	0.9661	50/50
0.0140	0.9669	50/50
0.0138	0.9674	50/50
0.0163	0.9555	29/100
0.0160	0.9576	27/100
0.0139	0.9666	39/100
0.0133	0.9699	76/100
0.0129	0.9715	100/100
0.0162	0.9578	34/200
0.0169	0.9581	42/200
0.0135	0.9675	40/200
0.0137	0.9689	55/200
0.0136	0.9683	72/200
0.0247	0.9132	
0.0294	0.8853	
0.0312	0.8691	10
0.0298	0.8794	10
0.0422	0.7644	10
0.0251	0.9122	25/25

0.0256	0.9099	25/25
0.0287	0.8852	25/25
0.0287	0.8769	25/25
0.0315	0.8586	25/25
0.0240	0.9187	41/50
0.0239	0.9169	50/50
0.0241	0.9156	44/50
0.0266	0.9079	50/50
0.0260	0.9029	50/50
0.0254	0.9100	46/100
0.0244	0.9182	61/100
0.0258	0.9071	52/100
0.0257	0.9095	50/100
0.0275	0.8909	47/100
0.0240	0.9197	53/200
0.0246	0.9115	43/200
0.0235	0.9235	63/200
0.0263	0.9070	46/200
0.0274	0.8895	55/200
0.0380	0.8394	10.0000
0.0273	0.8938	
0.0315	0.8622	10.0000
0.0316	0.8656	10.0000
0.0317	0.8647	10.0000
0.0276	0.9019	25/25
0.0268	0.9051	25/25
0.0275	0.8896	25/25
0.0278	0.8951	25/25
0.0291	0.8744	25/25
0.0254	0.9093	37/50
0.0266	0.9059	46/50
0.0263	0.9066	36/50
0.0278	0.8938	50/50
0.0242	0.9171	50/50
0.0253	0.9058	44/100
0.0247	0.9143	55/100
0.0273	0.8995	30/100
0.0244	0.9191	100/100
0.0283	0.8895	57/100

0.0242	0.9170	37/200
0.0227	0.9221	79/200
0.0242	0.9237	51/200
0.0296	0.8711	35/200
0.0256	0.9095	93/200
0.0244	0.9134	10.0000
0.0295	0.8788	10.0000
0.0297	0.8793	10.0000
0.0303	0.8706	10.0000
0.0333	0.8407	10.0000
0.0262	0.9103	25.0000
0.0245	0.9168	25.0000
0.0275	0.8909	25.0000
0.0274	0.8955	25.0000
0.0288	0.8810	25.0000
0.0233	0.9150	37/50
0.0250	0.9080	31/50
0.0265	0.9045	46/50
0.0330	0.8492	27/50
0.0252	0.9149	50/50
0.0243	0.9184	29/100
0.0235	0.9135	43/100
0.0258	0.9085	37/100
0.0287	0.8876	42/100
0.0284	0.8909	38/100
0.0256	0.9076	39/200
0.0229	0.9248	33/200
0.0274	0.8925	30/200
0.0243	0.9217	38/200
0.0280	0.8866	33/200
0.0689	0.4386	45940
0.0349	0.8320	10
0.0649	0.4059	10
0.0618	0.4946	10
0.0674	0.3584	10
0.0240	0.9186	25/25
0.0375	0.8099	25/25
0.0347	0.8332	25/25
0.0391	0.7996	25/25
0.0798	0.1285	24/25

0.0249	0.9151	50/50
0.0225	0.9229	50/50
0.0252	0.9149	50/50
0.0242	0.9143	50/50
0.0313	0.8688	50/50
0.0228	0.9249	66/100
0.0210	0.9353	100/100
0.0221	0.9298	100/100
0.0228	0.9256	100/100
0.0552	0.5744	23/100
0.0261	0.9123	70/200
0.0228	0.9273	88/200
0.0224	0.9246	78/200
0.0211	0.9328	165/200
0.0649	0.4555	22/200
0.0378	0.7965	10.0000
0.0553	0.5864	10.0000
0.0653	0.3847	10.0000
0.0436	0.7280	10.0000
0.0593	0.4816	10.0000
0.0261	0.9077	25/25
0.0281	0.8918	25/25
0.0268	0.8987	25/25
0.0385	0.8069	25/25
0.0693	0.3568	22/25
0.0239	0.9222	50/50
0.0243	0.9220	50/50
0.0262	0.9081	50/50
0.0285	0.8946	50/50
0.0609	0.4711	21/50
0.0243	0.9195	50/100
0.0245	0.9148	49/100
0.0227	0.9297	100/100
0.0510	0.6404	21/100
0.0371	0.8040	45/100
0.0256	0.9028	45/200
0.0236	0.9217	88/200
0.0214	0.9338	76/200
0.0511	0.6570	22/200
0.0242	0.9186	111/200

0.0428	0.7253	10.0000
0.0372	0.8213	10.0000
0.0464	0.7229	10.0000
0.0397	0.7799	10.0000
0.0469	0.7134	10.0000
0.0313	0.8839	25/25
0.0273	0.9013	25.0000
0.0293	0.8877	25.0000
0.0258	0.9073	25.0000
0.0295	0.8720	25.0000
0.0286	0.8809	31/50
0.0290	0.8936	50/50
0.0258	0.9025	45/50
0.0263	0.9081	50/50
0.0262	0.9093	50/50
0.0298	0.8900	48/100
0.0266	0.9049	49/100
0.0258	0.9071	43/100
0.0245	0.9145	54/100
0.0241	0.9164	90/100
0.0266	0.9033	51/200
0.0281	0.8981	41/200
0.0251	0.9124	56/200
0.0233	0.9186	65/200
0.0244	0.9189	84/200