Emilia Romagna Grand Prix, 2021

Forecasting Lando Norris's Next 5 Lap Times
Nathan Jones 2022

Name of Variable = time	
Period(s) of Differencing	1,1
Mean of Working Series	-0.37387
Standard Deviation	22.73916
Number of Observations	61
Observation(s) eliminated by differencing	2

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	43.92	6	<.0001	-0.680	0.285	-0.069	-0.161	0.271	-0.166
12	43.97	12	<.0001	0.020	0.007	0.007	-0.010	0.010	-0.004

Variance Estimate	517.2092
Std Error Estimate	22.74223
AIC	554.2658
SBC	554.2658
Number of Residuals	61

* AIC and SBC do not include log determinant.

Autocorrelation Check of Residuals									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	43.90	6	<.0001	-0.680	0.285	-0.069	-0.161	0.270	-0.166
12	43.95	12	<.0001	0.020	0.007	0.007	-0.010	0.010	-0.004
18	43.96	18	0.0006	0.001	0.002	-0.009	0.006	-0.002	-0.001
24	44.58	24	0.0065	0.009	-0.014	0.028	-0.052	0.050	-0.001

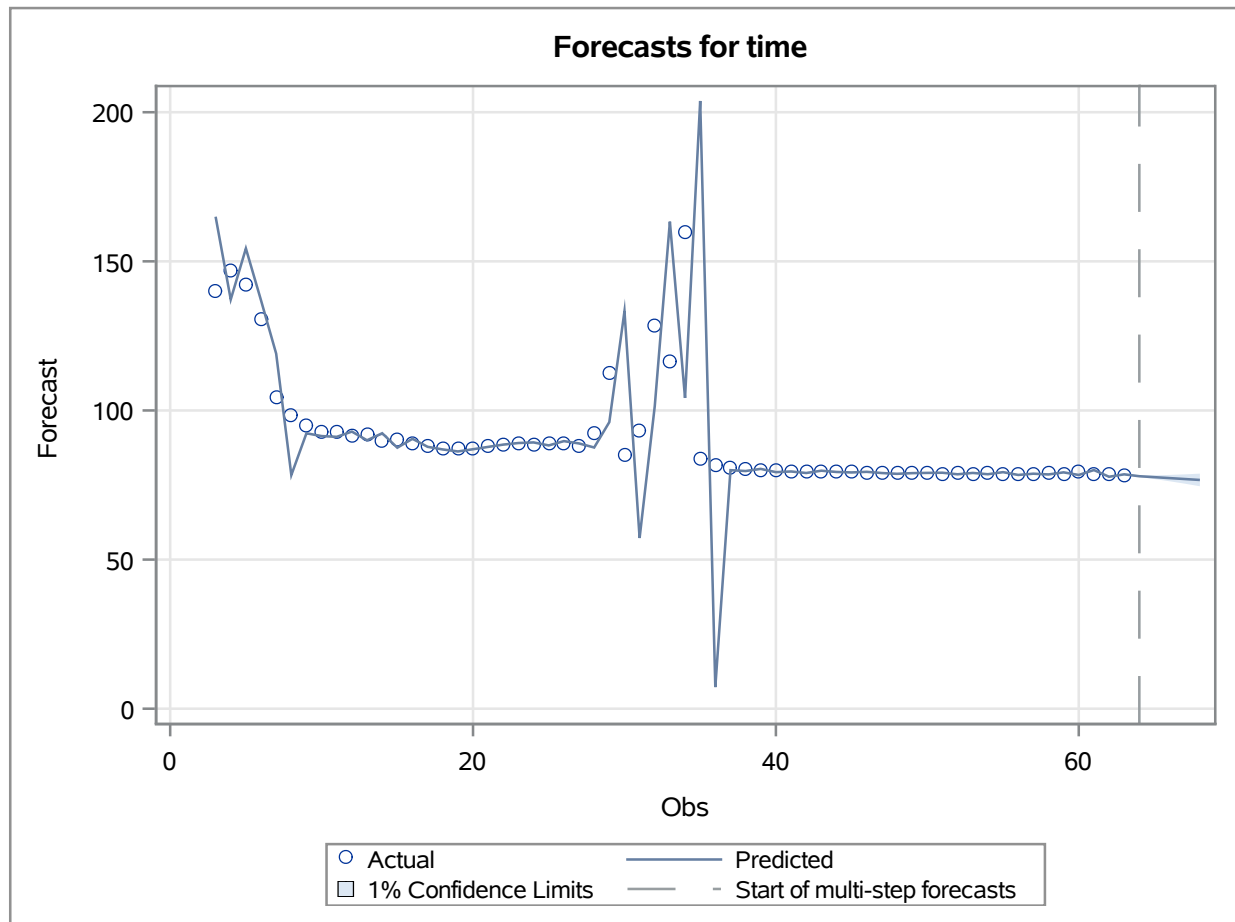| Model for variable time	
Period(s) of Differencing	1,1

No mean term in this model.

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Forecasts for variable time				
Obs	**Forecast**	**Std Error**	**1% Confidence Limits**	
64	77.9470	22.7422	77.6620	78.2320
65	77.6350	50.8532	76.9976	78.2724
66	77.3230	85.0936	76.2565	78.3895
67	77.0110	124.5643	75.4498	78.5722
68	76.6990	168.6609	74.5851	78.8129

Forecasts for time

Outlier Detection Summary	
Maximum number searched	2
Number found	2
Significance used	0.05

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Outlier Details				
Obs	**Type**	**Estimate**	**Chi-Square**	**Approx Prob>ChiSq**
34	Additive	61.77600	21916.44	<.0001
29	Additive	24.86400	3550.36	<.0001