Emilia Romagna Grand Prix, 2021

Forecasting Max Vestappen's Next 5 Lap Times
Nathan Jones 2022

Name of Variable = time	
Period(s) of Differencing	1,1
Mean of Working Series	-0.82154
Standard Deviation	19.16727
Number of Observations	61
Observation(s) eliminated by differencing	2

Autocorrelation Check for White Noise									
To Lag	Chi-Square	DF	Pr > ChiSq	Autocorrelations					
6	14.08	6	0.0288	-0.291	-0.202	-0.019	0.138	-0.134	0.222
12	16.86	12	0.1548	-0.196	0.021	0.019	0.004	-0.001	-0.008

Variance Estimate	368.059
Std Error Estimate	19.18486
AIC	533.5133
SBC	533.5133
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	14.06	6	0.0290	-0.290	-0.202	-0.019	0.138	-0.135	0.222
12	16.83	12	0.1560	-0.195	0.021	0.020	0.004	-0.001	-0.007
18	16.87	18	0.5321	0.012	-0.016	0.005	0.003	-0.004	-0.002
24	20.05	24	0.6940	0.013	0.018	-0.114	0.133	-0.032	0.017

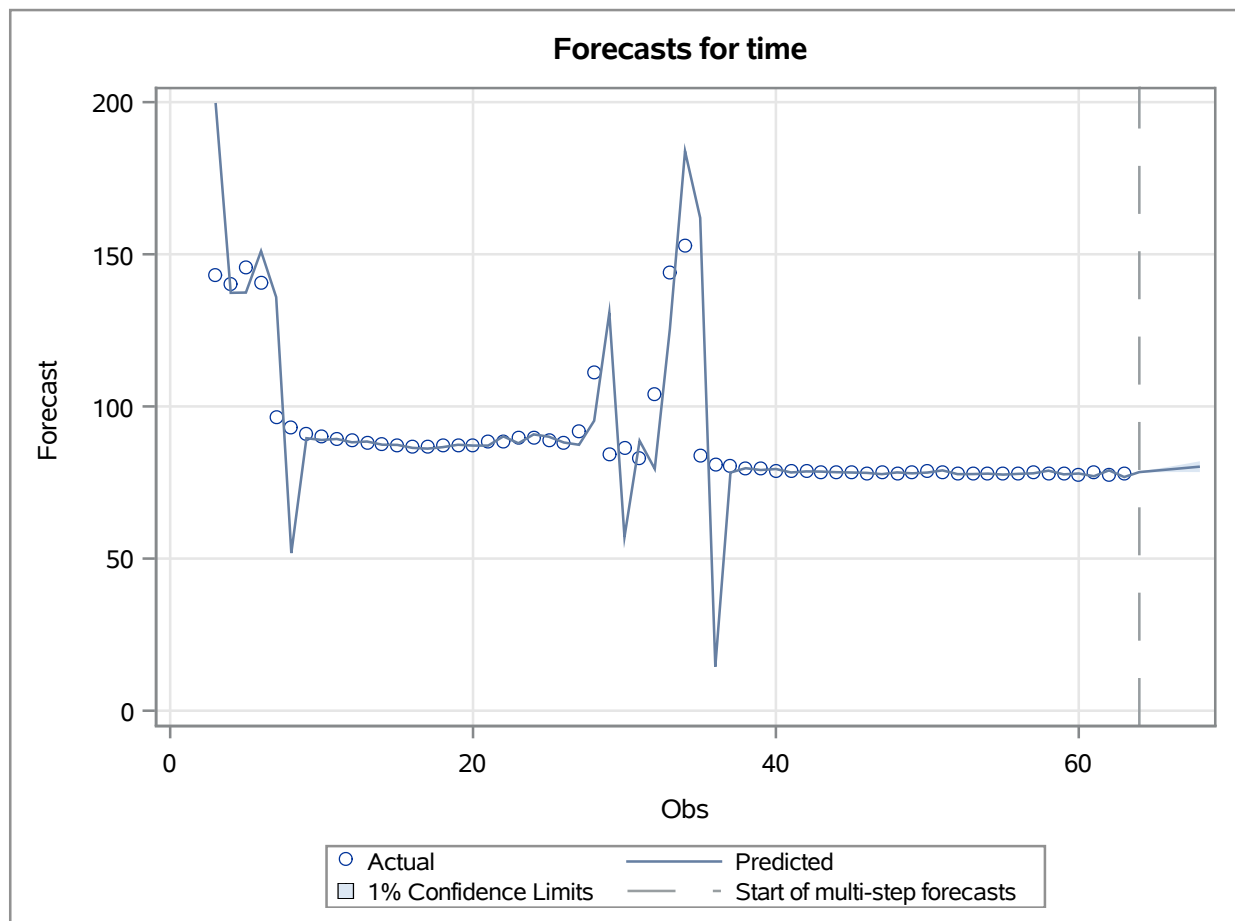| Model for variable time	
Period(s) of Differencing	1,1

No mean term in this model.

Emilia Romagna Grand Prix, 2021

Forecasting Max Vestappen's Next 5 Lap Times
Nathan Jones 2022

	Forecasts for variable time			
Obs	**Forecast**	**Std Error**	1% Confidence Limits	
64	78.4180	19.1849	78.1775	78.6585
65	78.8640	42.8987	78.3263	79.4017
66	79.3100	71.7832	78.4103	80.2097
67	79.7560	105.0798	78.4390	81.0730
68	80.2020	142.2788	78.4188	81.9852

Forecasts for time

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

Emilia Romagna Grand Prix, 2021

Forecasting Max Vestappen's Next 5 Lap Times
Nathan Jones 2022

Outlier Details				
Obs	Type	Estimate	Chi-Square	Approx Prob>ChiSq
35	Shift	-72.36300	19097.56	<.0001
7	Shift	-40.36850	5943.33	<.0001