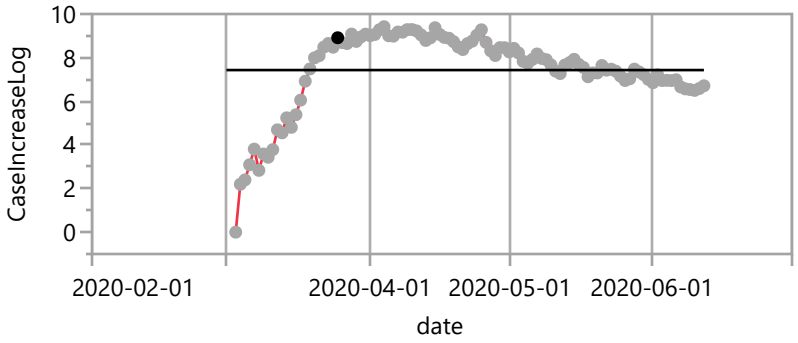
Time Series CaseIncreaseLog



Mean	7.4298824
Std	1.8193473
N	102
Zero Mean ADF	0.484258
Single Mean ADF	-5.626626
Trend ADF	-4.833615

Time Series Basic Diagnostics

Lag	AutoCorr	-.8 -.6 -.4 -.2 0 .2 .4 .6 .8	Ljung-Box Q	p-Value
0	1.0000		.	.
1	0.8944		84.0110	<.0001*
2	0.8345		157.886	<.0001*
3	0.7690		221.250	<.0001*
4	0.7116		276.065	<.0001*
5	0.6769		326.176	<.0001*
6	0.6081		367.030	<.0001*
7	0.5527		401.145	<.0001*
8	0.4805		427.199	<.0001*
9	0.4044		445.857	<.0001*
10	0.3485		459.860	<.0001*
11	0.2857		469.373	<.0001*
12	0.2373		476.012	<.0001*
13	0.1740		479.621	<.0001*
14	0.1151		481.218	<.0001*
15	0.0585		481.635	<.0001*
16	0.0152		481.664	<.0001*
17	-0.0230		481.730	<.0001*
18	-0.0458		481.995	<.0001*
19	-0.0695		482.612	<.0001*
20	-0.0848		483.542	<.0001*
21	-0.0938		484.694	<.0001*
22	-0.1167		486.501	<.0001*
23	-0.1309		488.802	<.0001*
24	-0.1486		491.807	<.0001*
25	-0.1673		495.661	<.0001*

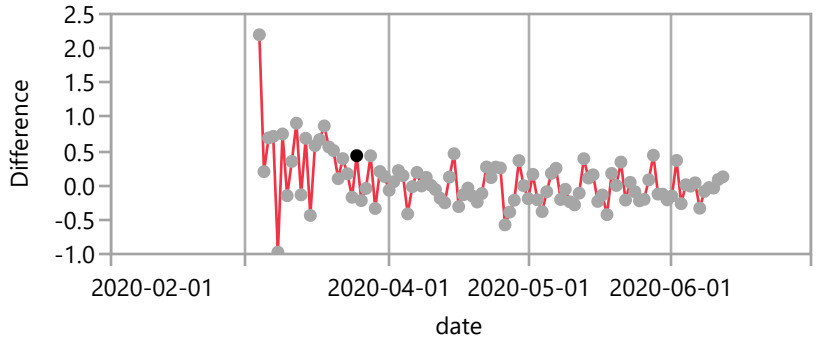
Lag	Partial	-.8	-.6	-.4	-.2	0	.2	.4	.6	.8
0	1.0000									
1	0.8944									
2	0.1730									
3	-0.0153									
4	0.0035									
5	0.0990									
6	-0.1486									
7	-0.0291									
8	-0.0999									
9	-0.0998									
10	0.0108									
11	-0.0287									
12	0.0002									
13	-0.0762									
14	-0.0292									
15	-0.0458									
16	0.0369									
17	-0.0192									
18	0.0665									
19	0.0014									
20	0.0377									
21	0.0311									
22	-0.0789									
23	-0.0343									
24	-0.0450									
25	-0.0594									

Time Series CaseIncreaseLog

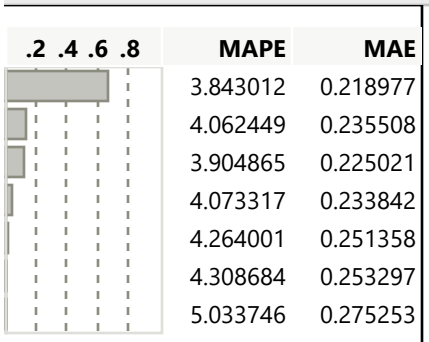
Model Comparison

Report	Graph		Model	DF	Variance	AIC	SBC	RSquare	-2LogLH	Weights
☑	☐		ARI(20, 1)	80	0.0849988	66.157149	121.07468	0.964	24.157149	0.669404
☑	☐		ARI(8, 1)	92	0.1028418	69.341384	92.877469	0.957	51.341384	0.136220
☑	☐		ARI(14, 1)	86	0.0960532	69.523675	108.75048	0.960	39.523675	0.124353
☑	☐		ARI(10, 1)	90	0.1028093	71.434553	100.20088	0.957	49.434553	0.047832
☑	☐		ARI(7, 1)	93	0.1086641	73.017171	93.938135	0.956	57.017171	0.021680
☑	☐		ARI(5, 1)	95	0.1206686	80.507318	96.198041	0.953	68.507318	0.000512
☑	☐		ARI(1, 1)	99	0.1529812	98.986024	104.21627	0.946	94.986024	0.000000

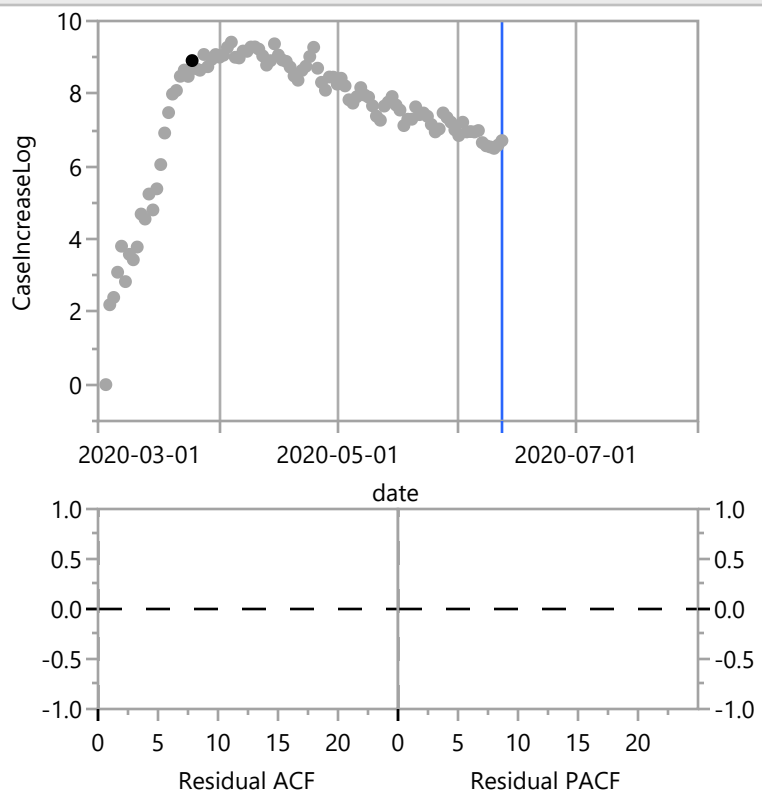
Difference: (1-B)^1



Mean	0.0664408
Std	0.3875135
N	101
Zero Mean ADF	-11.39117
Single Mean ADF	-11.48533
Trend ADF	-12.58983

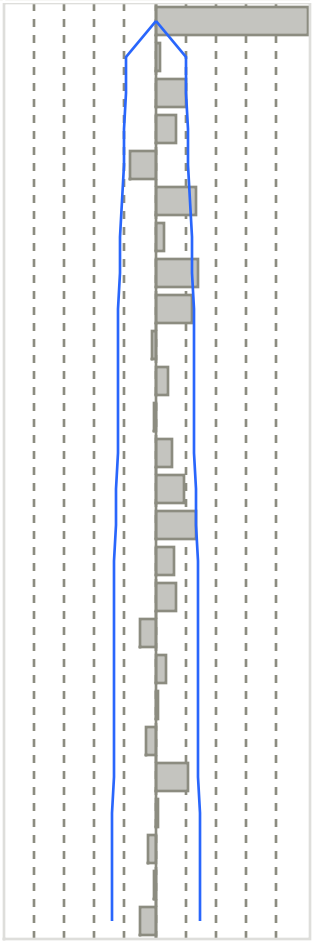


MAPE	MAE
3.843012	0.218977
4.062449	0.235508
3.904865	0.225021
4.073317	0.233842
4.264001	0.251358
4.308684	0.253297
5.033746	0.275253



Time Series CaseIncreaseLog

Difference: (1-B)^1

Lag	AutoCorr	-.8 -.6 -.4 -.2 0 .2 .4 .6 .8	Ljung-Box Q	p-Value
0	1.0000		.	.
1	0.0316		0.1038	0.7473
2	0.2017		4.3808	0.1119
3	0.1442		6.5866	0.0863
4	-0.1658		9.5335	0.0491*
5	0.2694		17.3973	0.0038*
6	0.0651		17.8617	0.0066*
7	0.2844		26.8156	0.0004*
8	0.2401		33.2666	<.0001*
9	-0.0155		33.2938	0.0001*
10	0.0835		34.0902	0.0002*
11	-0.0131		34.1100	0.0003*
12	0.1129		35.6001	0.0004*
13	0.1859		39.6844	0.0002*
14	0.2702		48.4130	<.0001*
15	0.1283		50.4038	<.0001*
16	0.1391		52.7728	<.0001*
17	-0.0979		53.9592	<.0001*
18	0.0767		54.6970	<.0001*
19	0.0135		54.7201	<.0001*
20	-0.0529		55.0792	<.0001*
21	0.2233		61.5656	<.0001*
22	0.0253		61.6501	<.0001*
23	-0.0450		61.9201	<.0001*
24	-0.0030		61.9213	<.0001*
25	-0.1035		63.3869	<.0001*

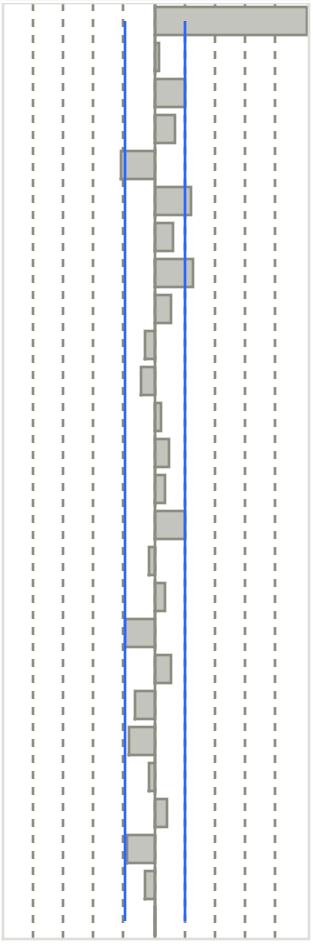
Model: ARI(1, 1)

Model Summary

DF	99	Stable	Yes
Sum of Squared Errors	15.1451349	Invertible	Yes
Variance Estimate	0.15298116		
Standard Deviation	0.39112806		
Akaike's 'A' Information Criterion	98.986024		
Schwarz's Bayesian Criterion	104.216265		
RSquare	0.9462375		
RSquare Adj	0.94569444		
MAPE	5.03374573		
MAE	0.27525263		
-2LogLikelihood	94.986024		

Parameter Estimates

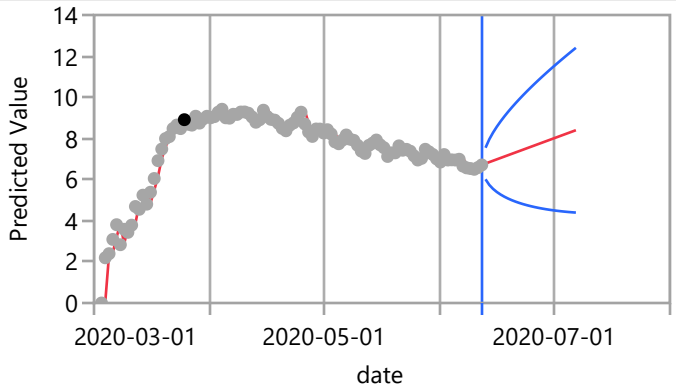
Term	Lag	Estimate	Std Error	t Ratio	Prob>|t|	Constant Estimate	Mu
AR1	1	0.04467377	0.1179399	0.38	0.7057	0.06444047	0.06745389
Intercept	0	0.06745389	0.0403996	1.67	0.0981		

Lag	Partial	-.8 -.6 -.4 -.2 0 .2 .4 .6 .8
0	1.0000	
1	0.0316	
2	0.2009	
3	0.1384	
4	-0.2229	
5	0.2445	
6	0.1244	
7	0.2593	
8	0.1111	
9	-0.0581	
10	-0.0791	
11	0.0411	
12	0.0998	
13	0.0783	
14	0.2051	
15	-0.0308	
16	0.0748	
17	-0.1902	
18	0.1096	
19	-0.1249	
20	-0.1626	
21	-0.0293	
22	0.0806	
23	-0.1756	
24	-0.0618	
25	0.0049	

Time Series CaseIncreaseLog

Model: ARI(1, 1)

Forecast



Model: ARI(14, 1)

Model Summary

DF	86	Stable	Yes
Sum of Squared Errors	8.26057697	Invertible	Yes
Variance Estimate	0.09605322		
Standard Deviation	0.30992454		
Akaike's 'A' Information Criterion	69.5236749		
Schwarz's Bayesian Criterion	108.750483		
RSquare	0.96046309		
RSquare Adj	0.95402685		
MAPE	3.90486509		
MAE	0.22502077		
-2LogLikelihood	39.5236749		

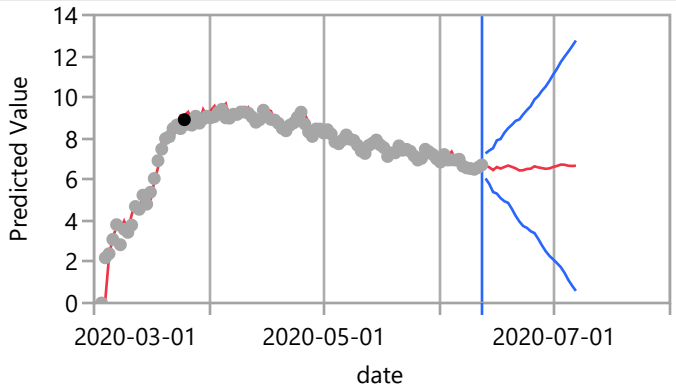
Parameter Estimates

Term	Lag	Estimate	Std Error	t Ratio	Prob>|t|	Constant Estimate	Mu
AR1	1	-0.1095754	0.1017485	-1.08	0.2845	0.01542432	0.14887083
AR2	2	0.2286179	0.1030024	2.22	0.0291*		
AR3	3	0.1296596	0.1050007	1.23	0.2203		
AR4	4	-0.2101626	0.1047879	-2.01	0.0480*		
AR5	5	0.2517570	0.1105079	2.28	0.0252*		
AR6	6	-0.0363277	0.1102961	-0.33	0.7427		
AR7	7	0.2334766	0.1039315	2.25	0.0272*		
AR8	8	0.2332188	0.1093534	2.13	0.0358*		
AR9	9	-0.2075679	0.1125600	-1.84	0.0686		
AR10	10	-0.0568344	0.1110230	-0.51	0.6100		
AR11	11	-0.0291650	0.1104755	-0.26	0.7924		
AR12	12	0.0417493	0.1101535	0.38	0.7056		
AR13	13	0.0848339	0.1103211	0.77	0.4440		
AR14	14	0.3427111	0.1109841	3.09	0.0027*		
Intercept	0	0.1488708	0.1775271	0.84	0.4040		

Time Series CaseIncreaseLog

Model: ARI(14, 1)

Forecast



Model: ARI(5, 1)

Model Summary

DF	95	Stable	Yes
Sum of Squared Errors	11.4635142	Invertible	Yes
Variance Estimate	0.12066857		
Standard Deviation	0.34737382		
Akaike's 'A' Information Criterion	80.5073176		
Schwarz's Bayesian Criterion	96.1980407		
RSquare	0.95339574		
RSquare Adj	0.95094289		
MAPE	4.30868436		
MAE	0.25329661		
-2LogLikelihood	68.5073176		

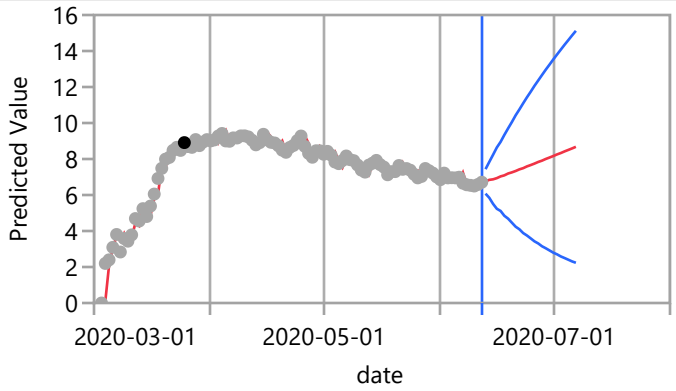
Parameter Estimates

Term	Lag	Estimate	Std Error	t Ratio	Prob>|t|	Constant Estimate	Mu
AR1	1	0.0707108	0.1027801	0.69	0.4931	0.03922842	0.08519737
AR2	2	0.2890571	0.1040043	2.78	0.0066*		
AR3	3	0.0907494	0.1076176	0.84	0.4012		
AR4	4	-0.2981838	0.1037527	-2.87	0.0050*		
AR5	5	0.3872248	0.1105828	3.50	0.0007*		
Intercept	0	0.0851974	0.0724936	1.18	0.2428		

Time Series CaseIncreaseLog

Model: ARI(5, 1)

Forecast



Model: ARI(20, 1)

Model Summary

DF	80	Stable	Yes
Sum of Squared Errors	6.79990049	Invertible	Yes
Variance Estimate	0.08499876		
Standard Deviation	0.29154546		
Akaike's 'A' Information Criterion	66.1571486		
Schwarz's Bayesian Criterion	121.074679		
RSquare	0.96375573		
RSquare Adj	0.95469466		
MAPE	3.84301153		
MAE	0.21897707		
-2LogLikelihood	24.1571486		

Parameter Estimates

Term	Lag	Estimate	Std Error	t Ratio	Prob>|t|	Constant Estimate	Mu
AR1	1	-0.0746813	0.1024015	-0.73	0.4679	0.01814299	0.12044743
AR2	2	0.1686780	0.1007885	1.67	0.0981		
AR3	3	0.1202055	0.1012025	1.19	0.2384		
AR4	4	-0.1635965	0.0998508	-1.64	0.1053		
AR5	5	0.2939955	0.1047464	2.81	0.0063*		
AR6	6	0.0449534	0.1062127	0.42	0.6733		
AR7	7	0.2537553	0.0961699	2.64	0.0100*		
AR8	8	0.1369901	0.1024398	1.34	0.1849		
AR9	9	-0.1930324	0.1068986	-1.81	0.0747		
AR10	10	-0.0447265	0.1150561	-0.39	0.6985		
AR11	11	-0.1212172	0.1099925	-1.10	0.2737		
AR12	12	0.1757531	0.1058514	1.66	0.1008		
AR13	13	0.0962527	0.1049082	0.92	0.3616		
AR14	14	0.3764114	0.0990264	3.80	0.0003*		
AR15	15	0.0944367	0.1114396	0.85	0.3993		
AR16	16	0.1335591	0.1099162	1.22	0.2279		
AR17	17	-0.1842583	0.1096790	-1.68	0.0969		

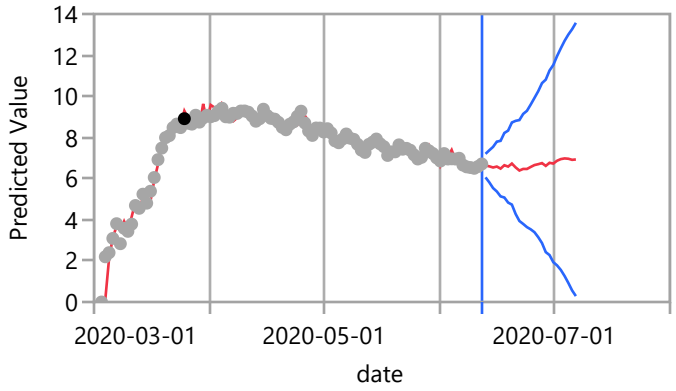
Time Series CaseIncreaseLog

Model: ARI(20, 1)

Parameter Estimates

Term	Lag	Estimate	Std Error	t Ratio	Prob>|t|
AR18	18	0.1468437	0.1112477	1.32	0.1906
AR19	19	-0.1425578	0.1130967	-1.26	0.2112
AR20	20	-0.2683945	0.1124177	-2.39	0.0193*
Intercept	0	0.1204474	0.1461330	0.82	0.4123

Forecast



Model: ARI(10, 1)

Model Summary

DF	90	Stable	Yes
Sum of Squared Errors	9.25283368	Invertible	Yes
Variance Estimate	0.10280926		
Standard Deviation	0.32063884		
Akaike's 'A' Information Criterion	71.4345534		
Schwarz's Bayesian Criterion	100.200879		
RSquare	0.9574667		
RSquare Adj	0.95274078		
MAPE	4.07331714		
MAE	0.23384163		
-2LogLikelihood	49.4345534		

Parameter Estimates

Term	Lag	Estimate	Std Error	t Ratio	Prob>|t|	Constant Estimate	Mu
AR1	1	-0.0883251	0.1087512	-0.81	0.4188	0.02440394	0.11630016
AR2	2	0.2234410	0.1094097	2.04	0.0441*		
AR3	3	0.1134058	0.1080344	1.05	0.2967		
AR4	4	-0.2437097	0.0961321	-2.54	0.0130*		
AR5	5	0.2704661	0.1026631	2.63	0.0099*		
AR6	6	0.0861519	0.1054184	0.82	0.4160		
AR7	7	0.3734507	0.1047038	3.57	0.0006*		
AR8	8	0.2727048	0.1110751	2.46	0.0160*		
AR9	9	-0.1448479	0.1129322	-1.28	0.2029		

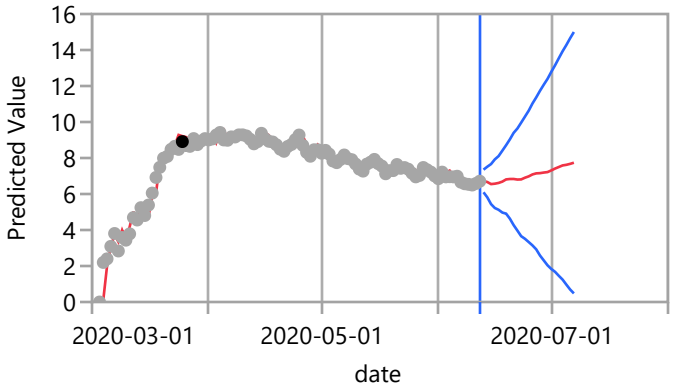
Time Series CaseIncreaseLog

Model: ARI(10, 1)

Parameter Estimates

Term	Lag	Estimate	Std Error	t Ratio	Prob>|t|
AR10	10	-0.0725735	0.1147432	-0.63	0.5287
Intercept	0	0.1163002	0.1276977	0.91	0.3649

Forecast



Model: ARI(8, 1)

Model Summary

DF	92	Stable	Yes
Sum of Squared Errors	9.46144381	Invertible	Yes
Variance Estimate	0.10284178		
Standard Deviation	0.32068954		
Akaike's 'A' Information Criterion	69.341384		
Schwarz's Bayesian Criterion	92.8774687		
RSquare	0.95737602		
RSquare Adj	0.95366959		
MAPE	4.06244874		
MAE	0.23550786		
-2LogLikelihood	51.341384		

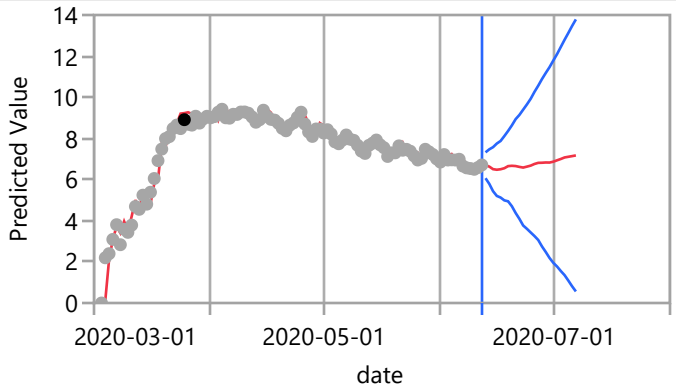
Parameter Estimates

Term	Lag	Estimate	Std Error	t Ratio	Prob>|t|	Constant Estimate	Mu
AR1	1	-0.1146207	0.1053086	-1.09	0.2793	0.02099592	0.12538496
AR2	2	0.1598067	0.1003733	1.59	0.1148		
AR3	3	0.0746352	0.0990018	0.75	0.4528		
AR4	4	-0.2828197	0.0929797	-3.04	0.0031*		
AR5	5	0.2729292	0.1005057	2.72	0.0079*		
AR6	6	0.0878561	0.1064565	0.83	0.4113		
AR7	7	0.3590548	0.1057746	3.39	0.0010*		
AR8	8	0.2757067	0.1116545	2.47	0.0154*		
Intercept	0	0.1253850	0.1458561	0.86	0.3922		

Time Series CaseIncreaseLog

Model: ARI(8, 1)

Forecast



Model: ARI(7, 1)

Model Summary

DF	93	Stable	Yes
Sum of Squared Errors	10.1057615	Invertible	Yes
Variance Estimate	0.1086641		
Standard Deviation	0.32964238		
Akaike's 'A' Information Criterion	73.0171707		
Schwarz's Bayesian Criterion	93.9381349		
RSquare	0.95630566		
RSquare Adj	0.95301684		
MAPE	4.2640007		
MAE	0.25135773		
-2LogLikelihood	57.0171707		

Parameter Estimates

Term	Lag	Estimate	Std Error	t Ratio	Prob>|t|	Constant Estimate	Mu
AR1	1	-0.0215743	0.1017663	-0.21	0.8326	0.02625634	0.11263723
AR2	2	0.2002796	0.1021886	1.96	0.0530		
AR3	3	0.1357108	0.1001186	1.36	0.1785		
AR4	4	-0.3253193	0.0991449	-3.28	0.0015*		
AR5	5	0.2942410	0.1059645	2.78	0.0066*		
AR6	6	0.1172500	0.1098024	1.07	0.2884		
AR7	7	0.3663070	0.1098679	3.33	0.0012*		
Intercept	0	0.1126372	0.1219576	0.92	0.3581		

Time Series CaseIncreaseLog

Model: ARI(7, 1)

Forecast