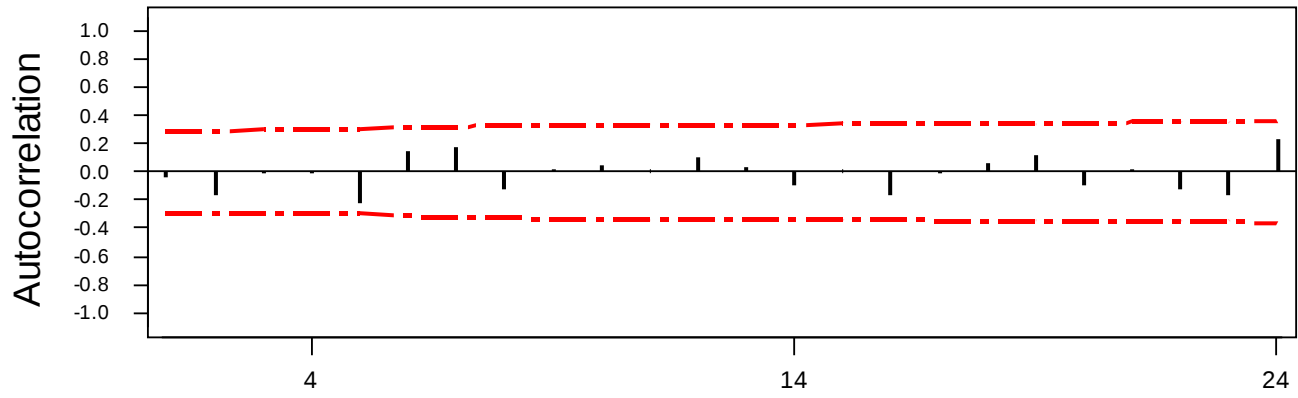


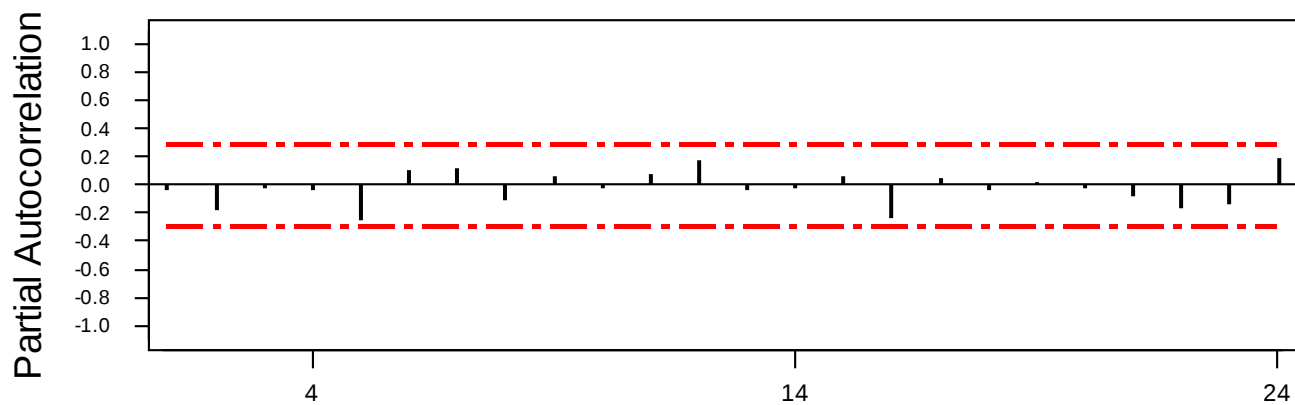
الملاحق

Autocorrelation Function for Rainfall (mm)



Lag	Corr	T	LBQ	Lag	Corr	T	LBQ	Lag	Corr	T	LBQ	Lag	Corr	T	LBQ
1	-0.04	-0.29	0.09	8	-0.13	-0.81	8.68	15	0.00	0.01	10.14	22	-0.14	-0.77	16.29
2	-0.18	-1.22	1.72	9	0.01	0.09	8.70	16	-0.17	-1.01	12.31	23	-0.17	-0.99	19.21
3	-0.01	-0.10	1.73	10	0.05	0.29	8.84	17	-0.01	-0.06	12.31	24	0.23	1.28	24.57
4	-0.01	-0.05	1.73	11	0.00	0.01	8.84	18	0.06	0.33	12.57				
5	-0.23	-1.57	4.78	12	0.09	0.57	9.43	19	0.11	0.67	13.66				
6	0.14	0.87	5.84	13	0.03	0.20	9.51	20	-0.10	-0.60	14.58				
7	0.18	1.10	7.64	14	-0.09	-0.57	10.14	21	0.01	0.08	14.60				

Partial Autocorrelation Function for Rainfall (mm)



Lag	PAC	T	Lag	PAC	T	Lag	PAC	T	Lag	PAC	T
1	-0.04	-0.29	8	-0.11	-0.75	15	0.06	0.41	22	-0.17	-1.18
2	-0.18	-1.24	9	0.06	0.43	16	-0.24	-1.69	23	-0.15	-1.02
3	-0.03	-0.22	10	-0.02	-0.17	17	0.05	0.32	24	0.18	1.24
4	-0.04	-0.30	11	0.07	0.48	18	-0.05	-0.33			
5	-0.25	-1.76	12	0.18	1.23	19	0.01	0.08			
6	0.11	0.74	13	-0.04	-0.26	20	-0.03	-0.21			
7	0.11	0.75	14	-0.03	-0.19	21	-0.08	-0.55			

ARIMA Model: Rainfall (mm)

ARIMA model for Rainfall (mm)

Estimates at each iteration

Iteration SSE Parameters

0	318640	0.100	0.100	229.254
1	317160	0.069	0.131	236.832
2	316035	0.219	0.281	198.713
3	314738	0.368	0.431	160.783
4	313175	0.515	0.581	123.146
5	311296	0.659	0.731	86.496
6	306750	0.733	0.880	67.361
7	305508	0.775	0.913	56.534
8	304313	0.807	0.947	48.466
9	303993	0.793	0.940	51.825
10	303893	0.787	0.942	53.282

Unable to reduce sum of squares any further

Final Estimates of Parameters

Type	Coef	SE Coef	T	P
AR 1	0.7872	0.1587	4.96	0.000
MA 1	0.9418	0.1122	8.39	0.000
Constant	53.2822	0.9311	57.22	0.000
Mean	250.334	4.375		

Number of observations: 48

Residuals: SS = 302175 (backforecasts
excluded)

MS = 6715 DF = 45

Modified Box-Pierce (Ljung-Box) Chi-Square statistic

Lag	12	24	36	48
* Chi-Square	7.5	22.5	34.4	
* DF	9	21	33	
. P-Value	0.581	0.373	0.401	