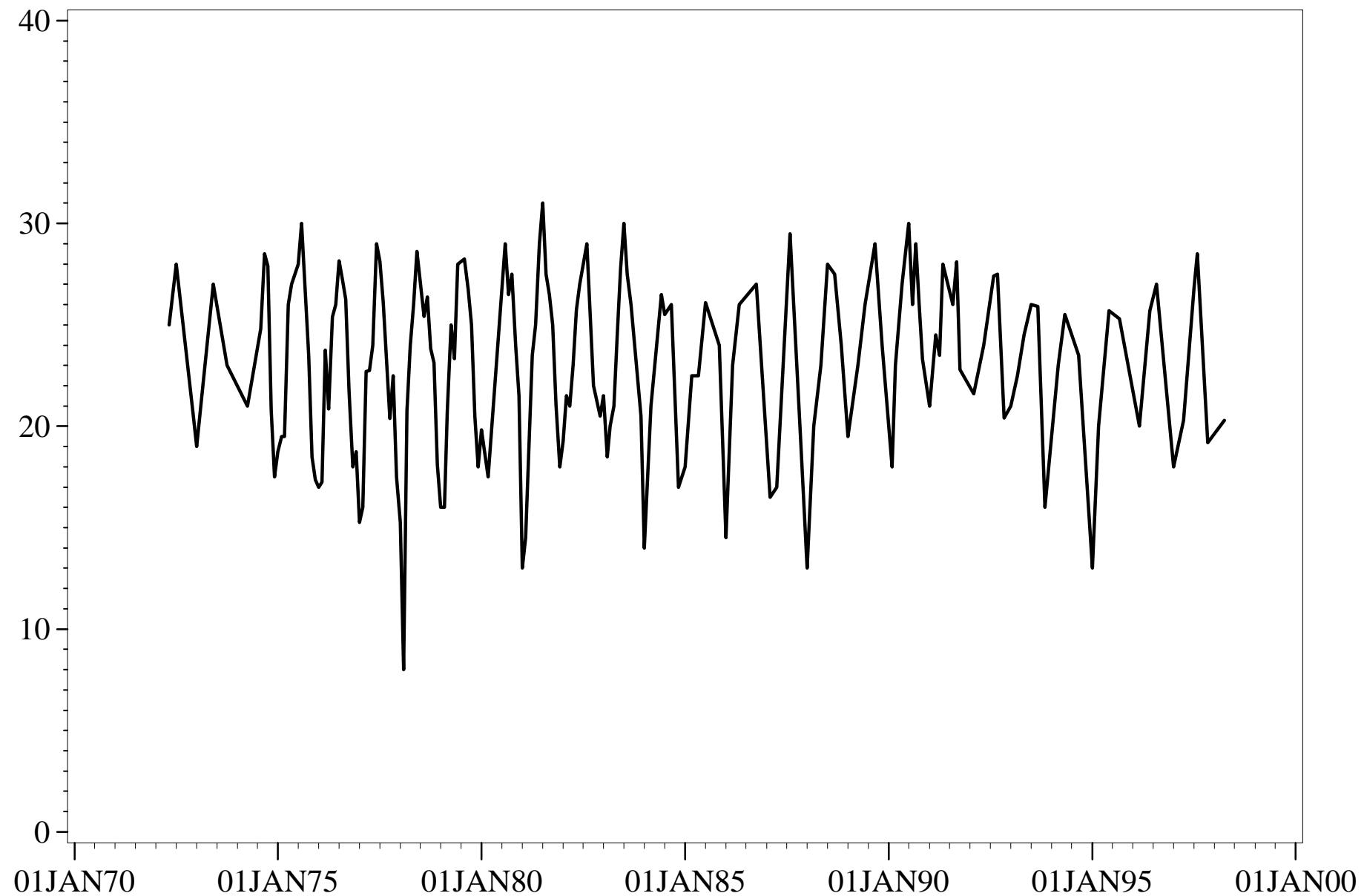


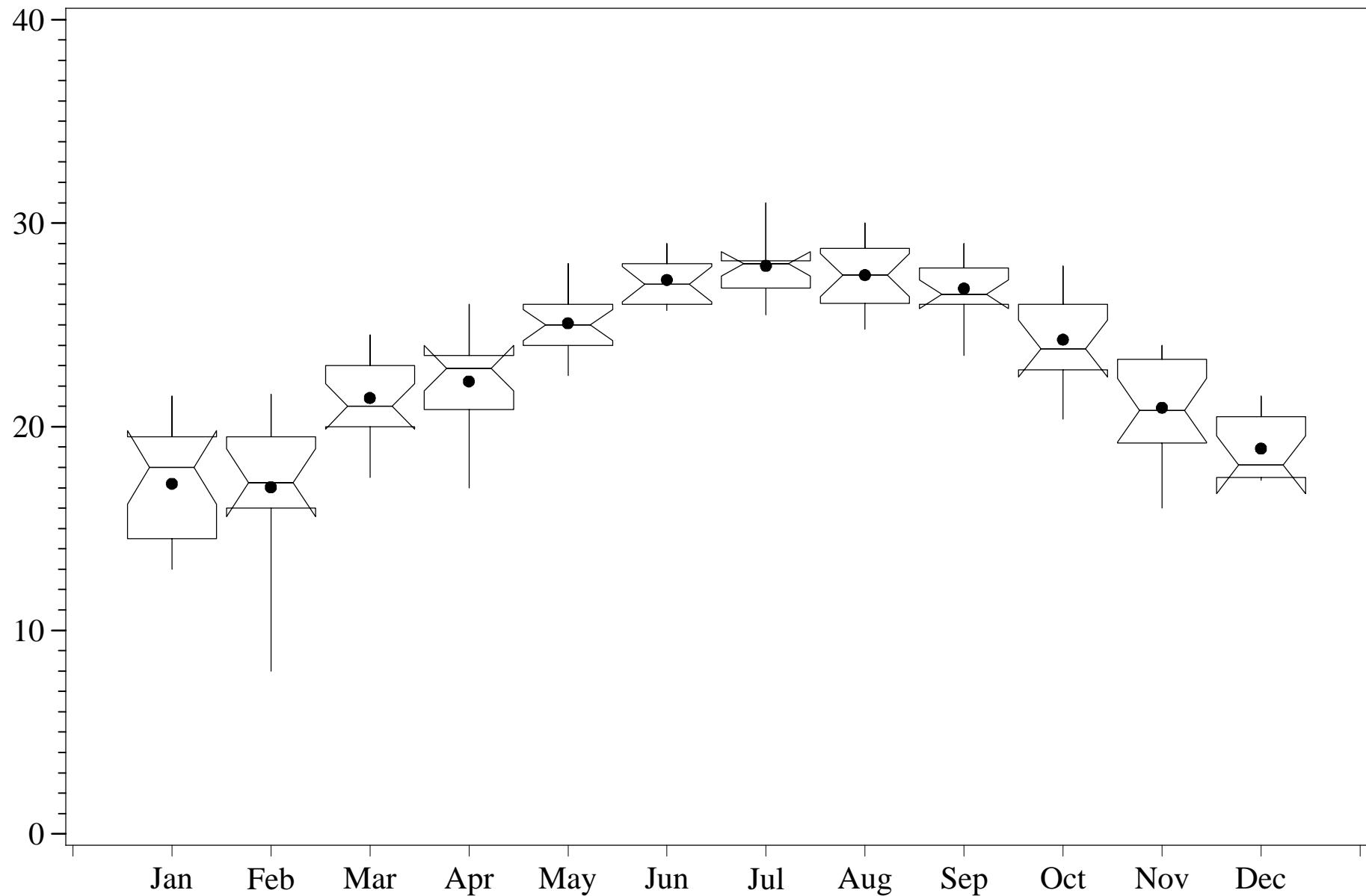
Temperature
(C)

Horse Creek Trends Appendix - Display 1
Monthly Data Time Series
for Surface Temperature at FDEP Station 25020111
Unadjusted for Seasonal Medians



Temperature
(C)

Horse Creek Trends Appendix - Display 2
Seasonal Univariate Statistics
for Surface Temperature at FDEP Station 25020111

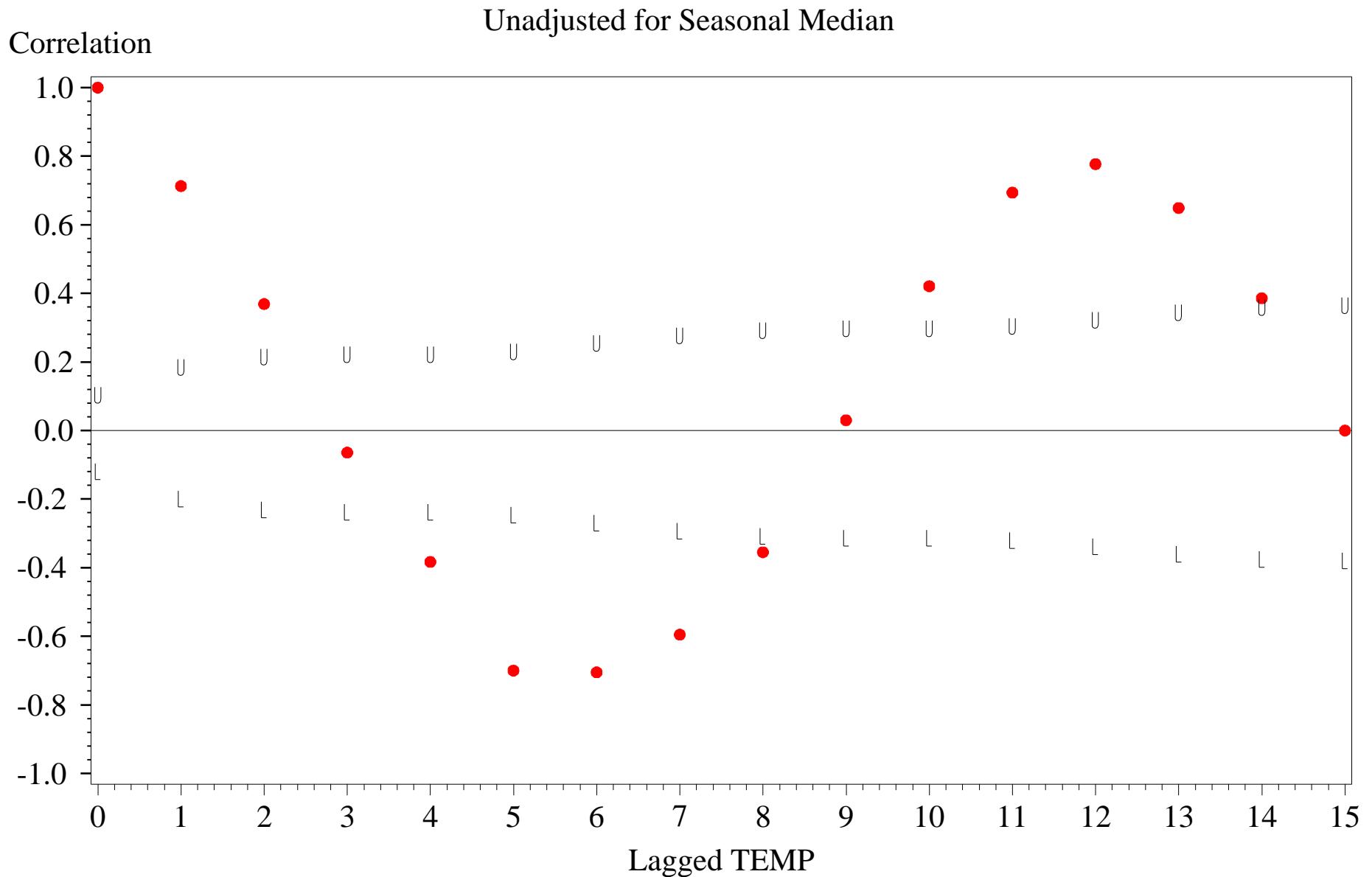


Horse Creek Trends Appendix - Display 3
Autocorrelation Statistics for Surface Temperature at FDEP Station 25020111

Unadjusted for Seasonal Medians

Lagged TEMP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.713	0.096	0.192	-0.192
2	0.369	0.111	0.223	-0.223
3	-0.064	0.115	0.230	-0.230
4	-0.383	0.115	0.230	-0.230
5	-0.700	0.119	0.238	-0.238
6	-0.705	0.131	0.262	-0.262
7	-0.595	0.142	0.285	-0.285
8	-0.355	0.150	0.300	-0.300
9	0.030	0.152	0.305	-0.305
10	0.421	0.152	0.305	-0.305
11	0.694	0.156	0.312	-0.312
12	0.777	0.165	0.330	-0.330
13	0.649	0.176	0.352	-0.352
14	0.386	0.183	0.367	-0.367
15	0.000	0.186	0.372	-0.372

Horse Creek Trends Appendix - Display 4
Correlogram for Surface Temperature at FDEP Station 25020111



Horse Creek Trends Appendix - Display 5

Seasonal Kendall Tau Trend Test Statistics
for Surface Temperature at FDEP Station 25020111

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.025	0.664	0.696	0

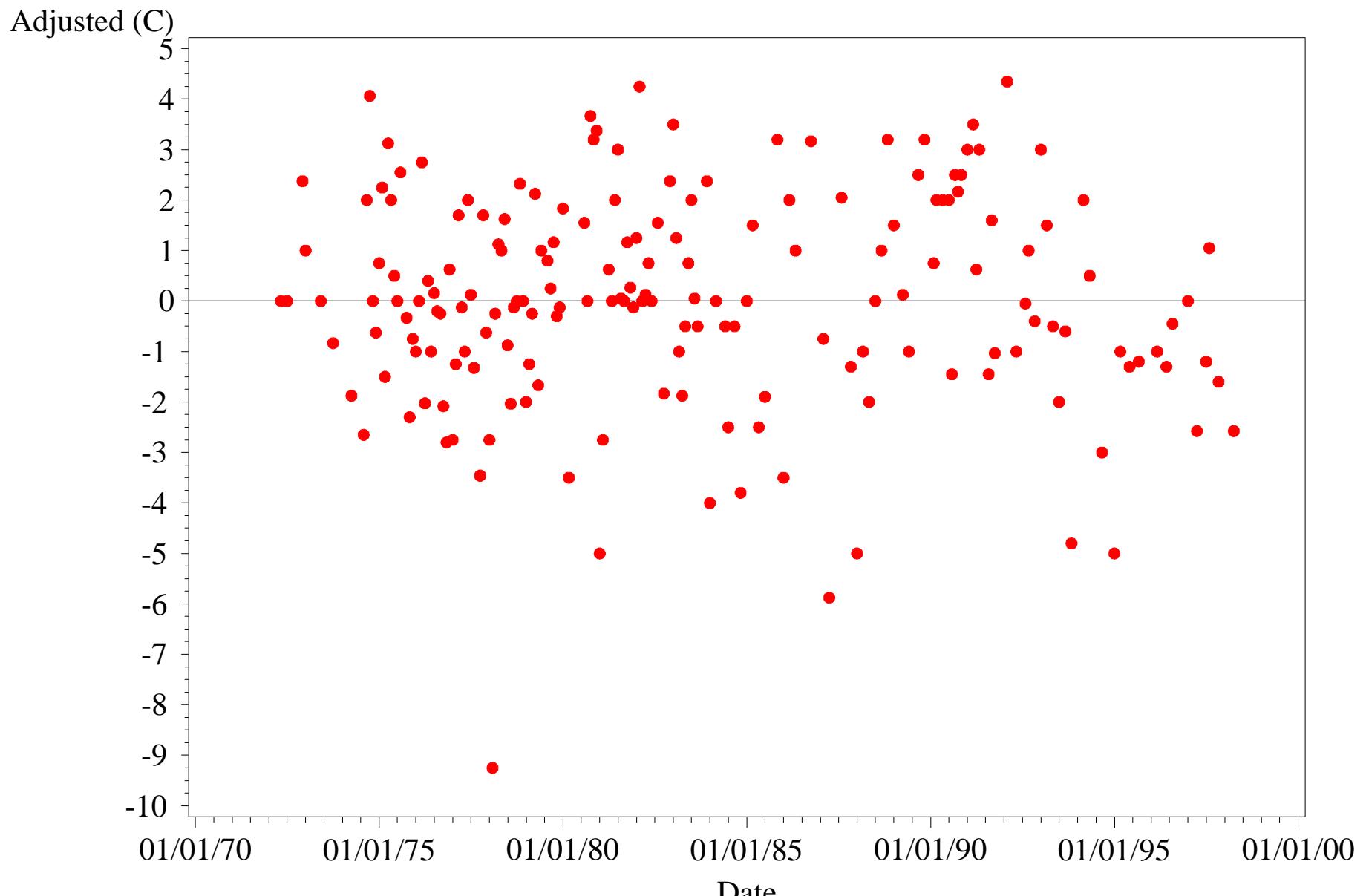
Horse Creek Trends Appendix - Display 6

Seasonal Kendall Tau Trend Test Statistics
for Surface Temperature at FDEP Station 25020111

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.025177	0.66379	0.69577	0

Horse Creek Trends Appendix - Display 7
Time Series Plot of Surface Temperature Data Adjusted for Season and Detrended
at FDEP Station 25020111



Zero Reference Line Shown

Horse Creek Trends Appendix - Display 8
Autocorrelation Statistics for Surface Temperature at FDEP Station 25020111

Adjusted for Seasonal Median and Detrended

Lagged TEMP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.155	0.096	0.192	-0.192
2	0.062	0.097	0.194	-0.194
3	-0.103	0.097	0.194	-0.194
4	0.128	0.097	0.195	-0.195
5	-0.002	0.098	0.196	-0.196
6	0.127	0.098	0.196	-0.196
7	0.122	0.098	0.197	-0.197
8	-0.033	0.099	0.198	-0.198
9	0.018	0.099	0.198	-0.198
10	0.173	0.099	0.198	-0.198
11	0.211	0.100	0.200	-0.200
12	0.081	0.101	0.203	-0.203
13	0.045	0.101	0.203	-0.203
14	0.143	0.102	0.203	-0.203
15	0.127	0.102	0.204	-0.204

Horse Creek Trends Appendix - Display 9

Correlogram for Surface Temperature at FDEP Station 25020111

Adjusted for Seasonal Median and Detrended

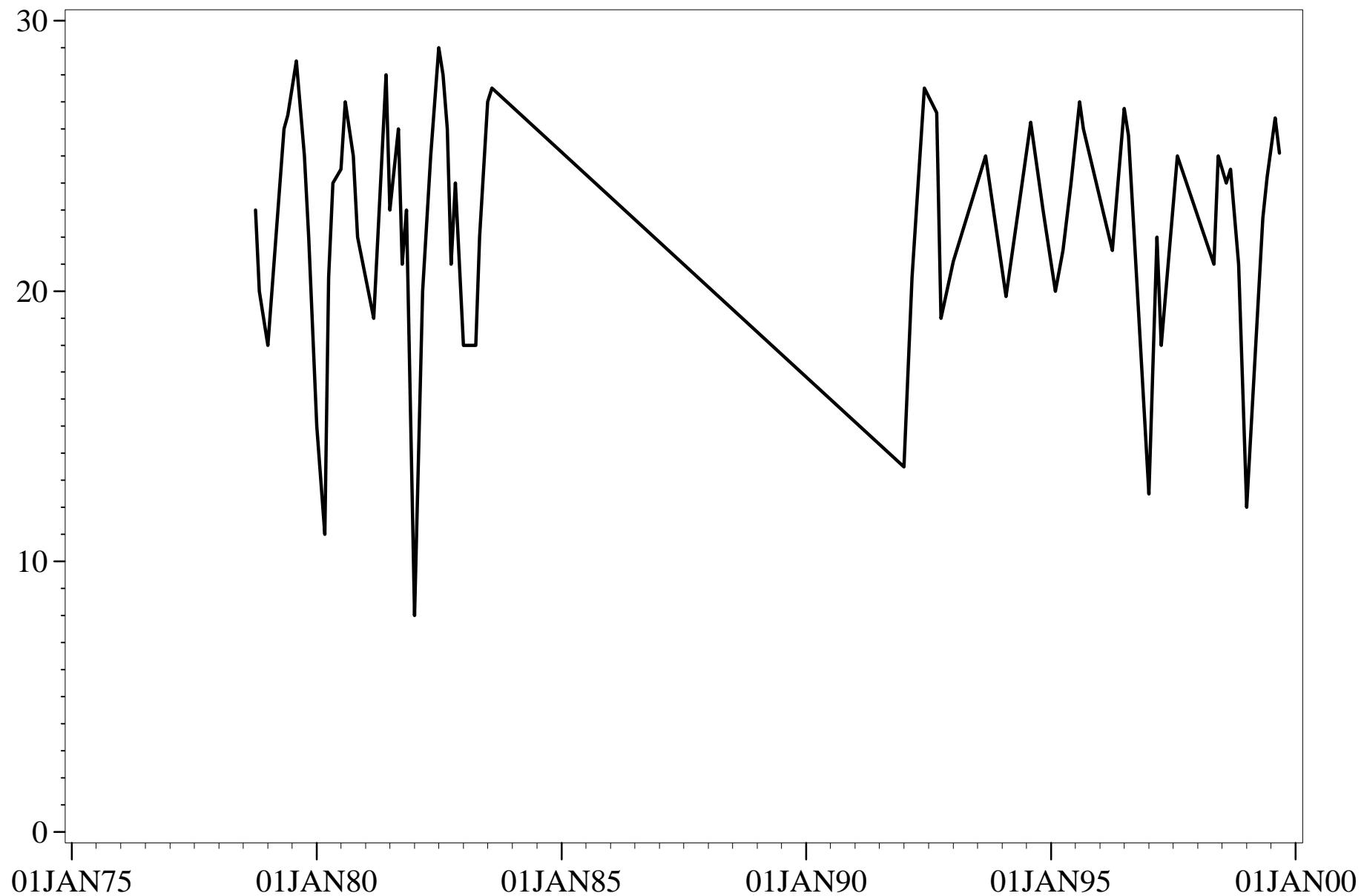
Correlation

Lagged TEMP	Correlation
0	1.00
1	~0.15
2	~0.08
3	-0.12
4	~0.12
5	0.00
6	~0.12
7	~0.12
8	-0.05
9	0.02
10	~0.18
11	~0.22
12	~0.08
13	~0.05
14	~0.15
15	~0.12

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

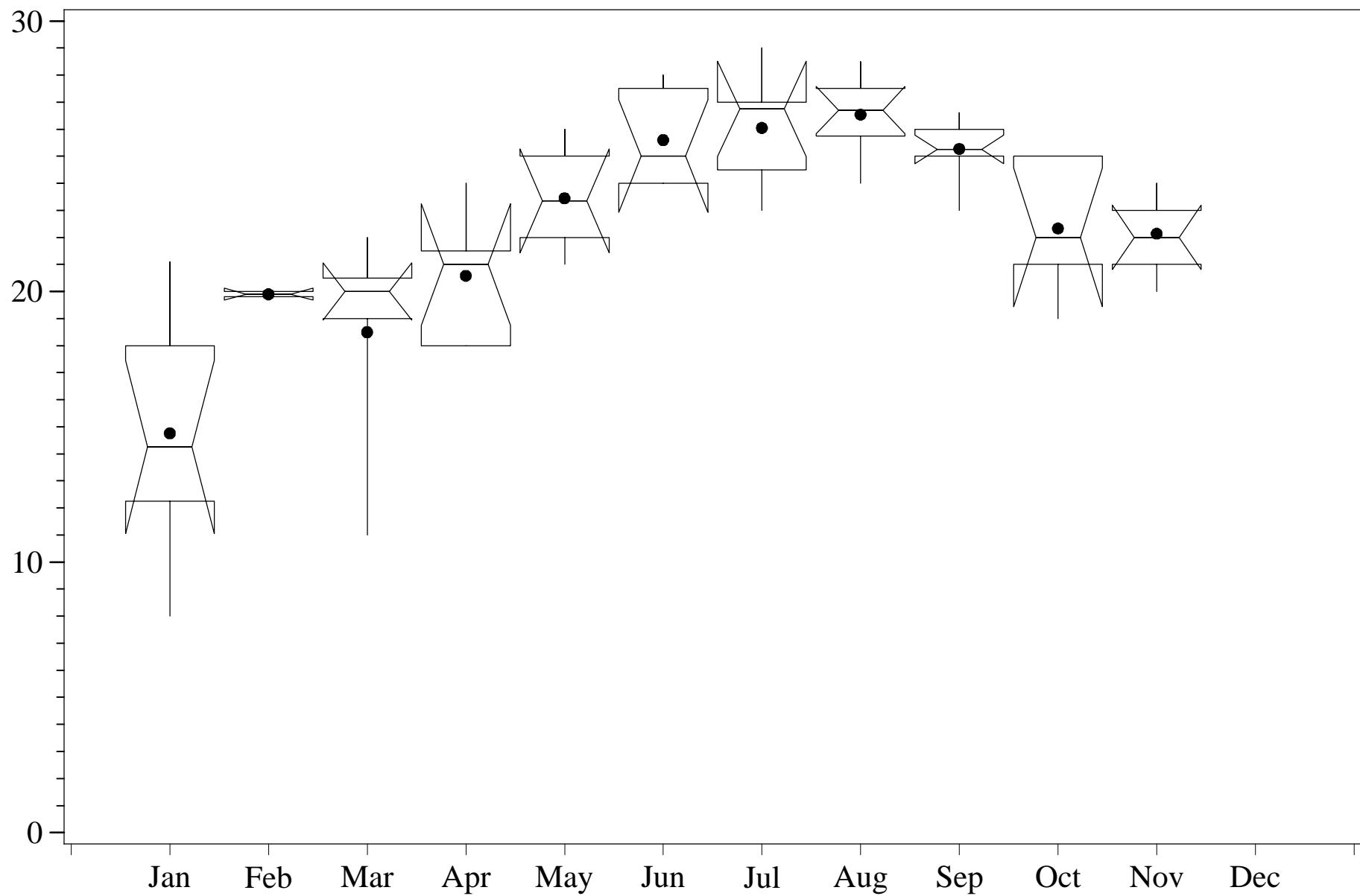
Temperature
(C)

Horse Creek Trends Appendix - Display 10
Monthly Data Time Series
for Surface Temperature at USGS Station 02297155
Unadjusted for Seasonal Medians



Temperature
(C)

Horse Creek Trends Appendix - Display 11
Seasonal Univariate Statistics
for Surface Temperature at USGS Station 02297155

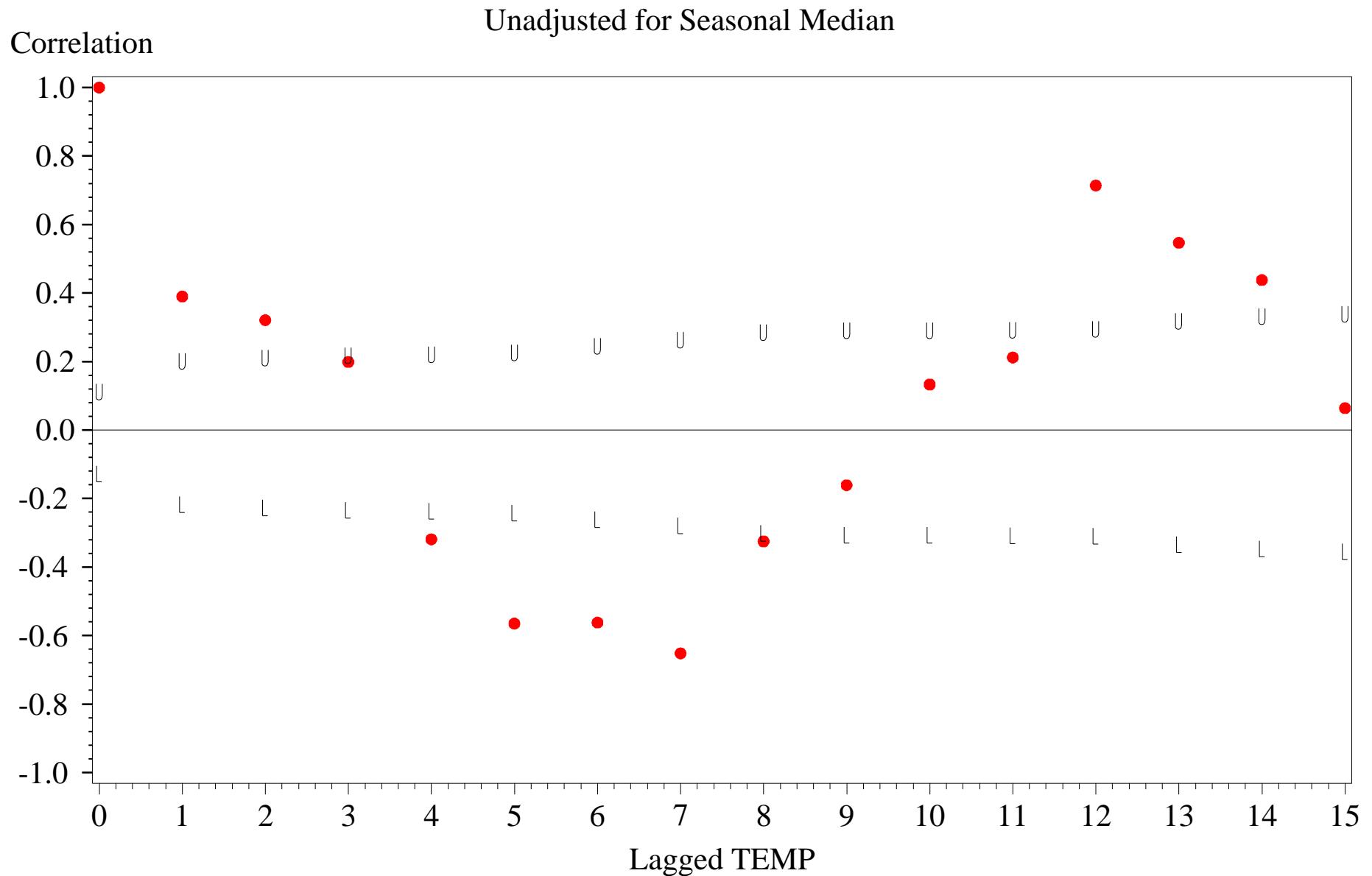


Horse Creek Trends Appendix - Display 12
Autocorrelation Statistics for Surface Temperature at USGS Station 02297155

Unadjusted for Seasonal Medians

Lagged TEMP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.060	0.120	-0.120
1	0.390	0.104	0.209	-0.209
2	0.321	0.109	0.219	-0.219
3	0.199	0.113	0.226	-0.226
4	-0.319	0.114	0.228	-0.228
5	-0.565	0.117	0.234	-0.234
6	-0.562	0.127	0.253	-0.253
7	-0.652	0.135	0.271	-0.271
8	-0.325	0.146	0.293	-0.293
9	-0.161	0.149	0.298	-0.298
10	0.133	0.150	0.299	-0.299
11	0.212	0.150	0.300	-0.300
12	0.714	0.151	0.302	-0.302
13	0.547	0.163	0.326	-0.326
14	0.438	0.169	0.339	-0.339
15	0.064	0.173	0.347	-0.347

Horse Creek Trends Appendix - Display 13
Correlogram for Surface Temperature at USGS Station 02297155



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Horse Creek Trends Appendix - Display 14

Seasonal Kendall Tau Trend Test Statistics
for Surface Temperature at USGS Station 02297155

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.29	.005	0.029	-0.1

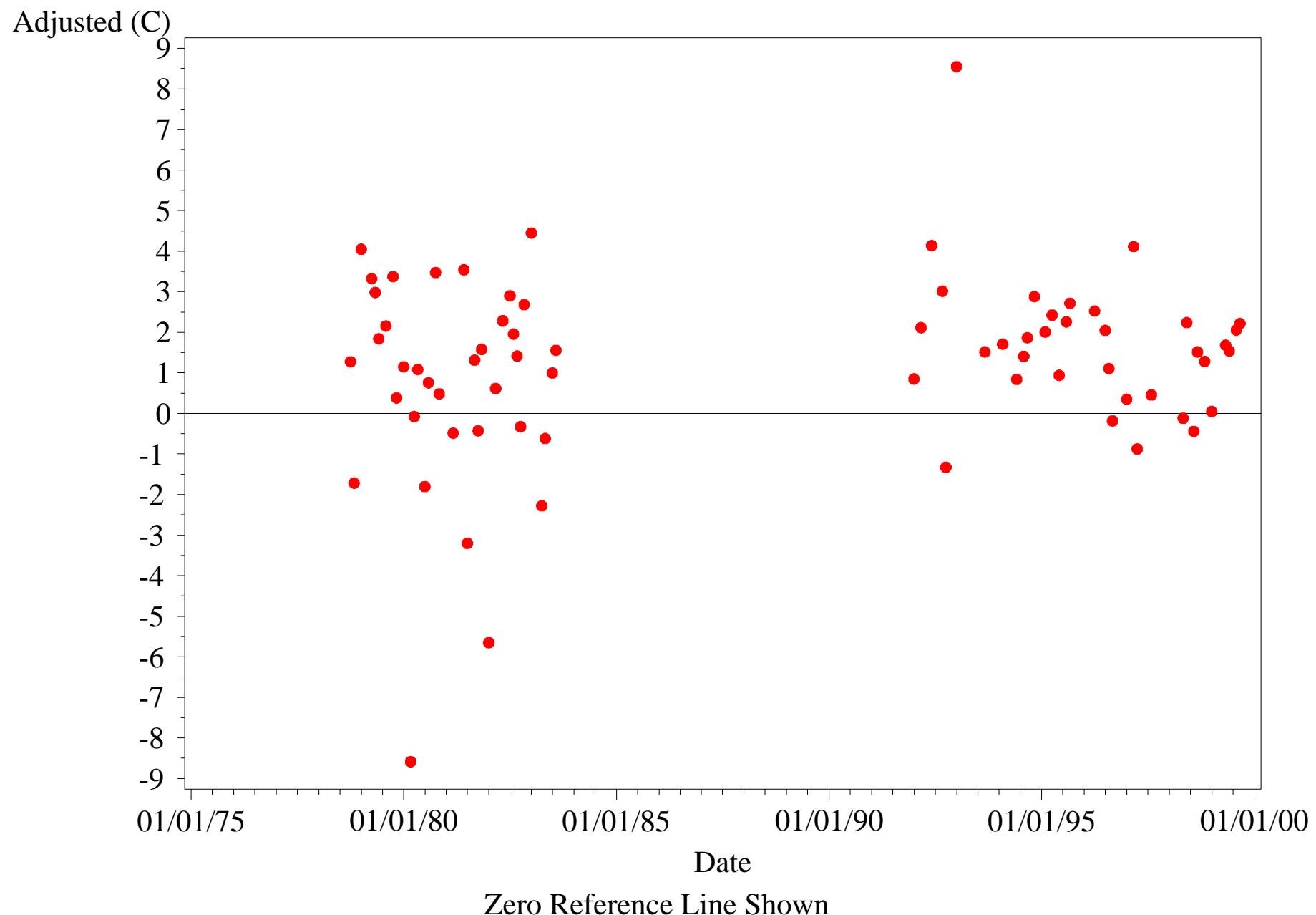
Horse Creek Trends Appendix - Display 15

Seasonal Kendall Tau Trend Test Statistics
for Surface Temperature at USGS Station 02297155

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.29032	.00455652	0.028940	-0.1

Horse Creek Trends Appendix - Display 16
Time Series Plot of Surface Temperature Data Adjusted for Season and Detrended
at USGS Station 02297155



Horse Creek Trends Appendix - Display 17
Autocorrelation Statistics for Surface Temperature at USGS Station 02297155
Adjusted for Seasonal Median and Detrended

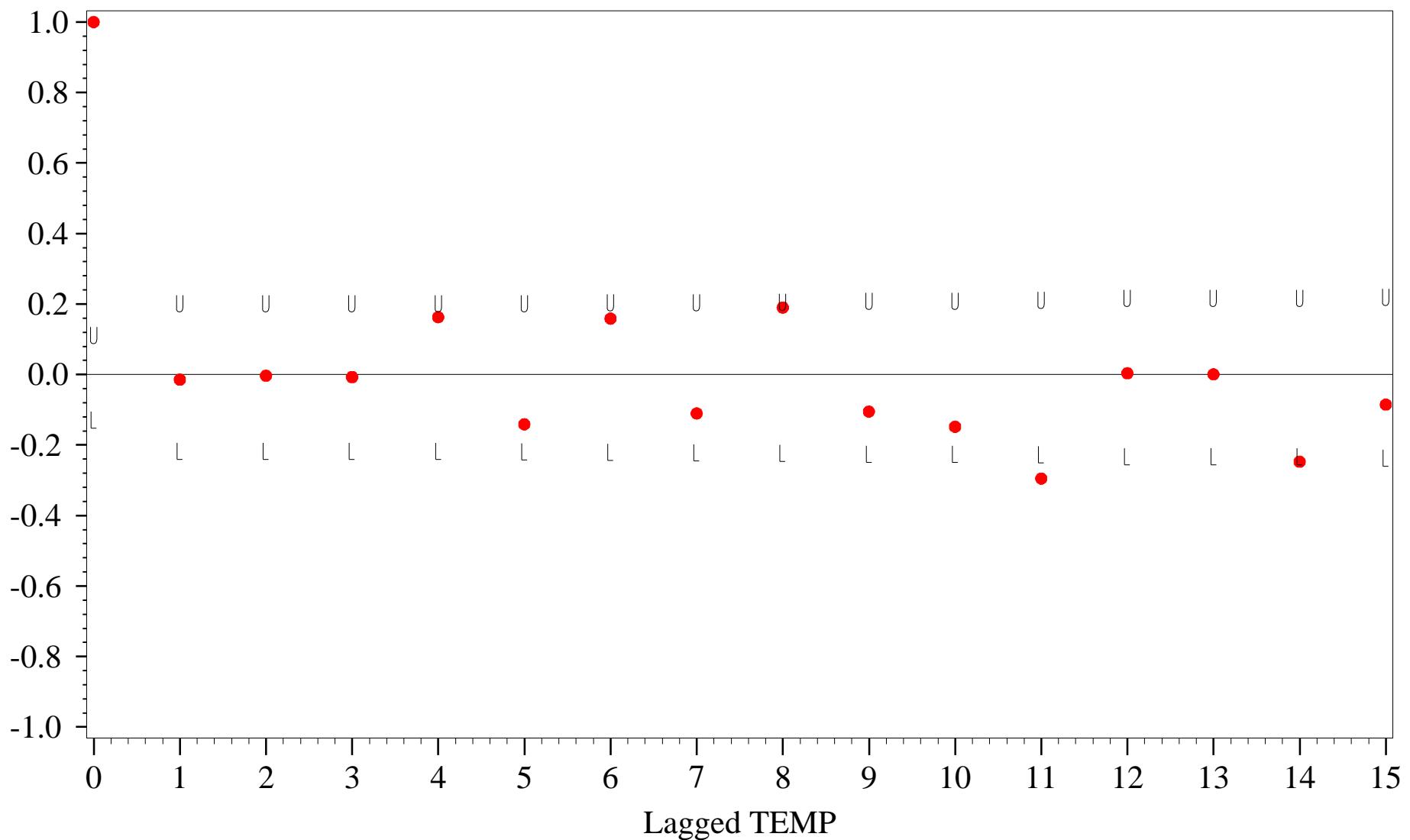
Lagged TEMP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.060	0.120	-0.120
1	-0.014	0.104	0.209	-0.209
2	-0.003	0.104	0.209	-0.209
3	-0.007	0.104	0.209	-0.209
4	0.163	0.104	0.209	-0.209
5	-0.141	0.105	0.210	-0.210
6	0.159	0.106	0.212	-0.212
7	-0.110	0.107	0.213	-0.213
8	0.190	0.107	0.214	-0.214
9	-0.105	0.108	0.217	-0.217
10	-0.148	0.109	0.217	-0.217
11	-0.295	0.109	0.219	-0.219
12	0.004	0.112	0.225	-0.225
13	0.001	0.112	0.225	-0.225
14	-0.247	0.112	0.225	-0.225
15	-0.085	0.114	0.228	-0.228

Horse Creek Trends Appendix - Display 18

Correlogram for Surface Temperature at USGS Station 02297155

Correlation

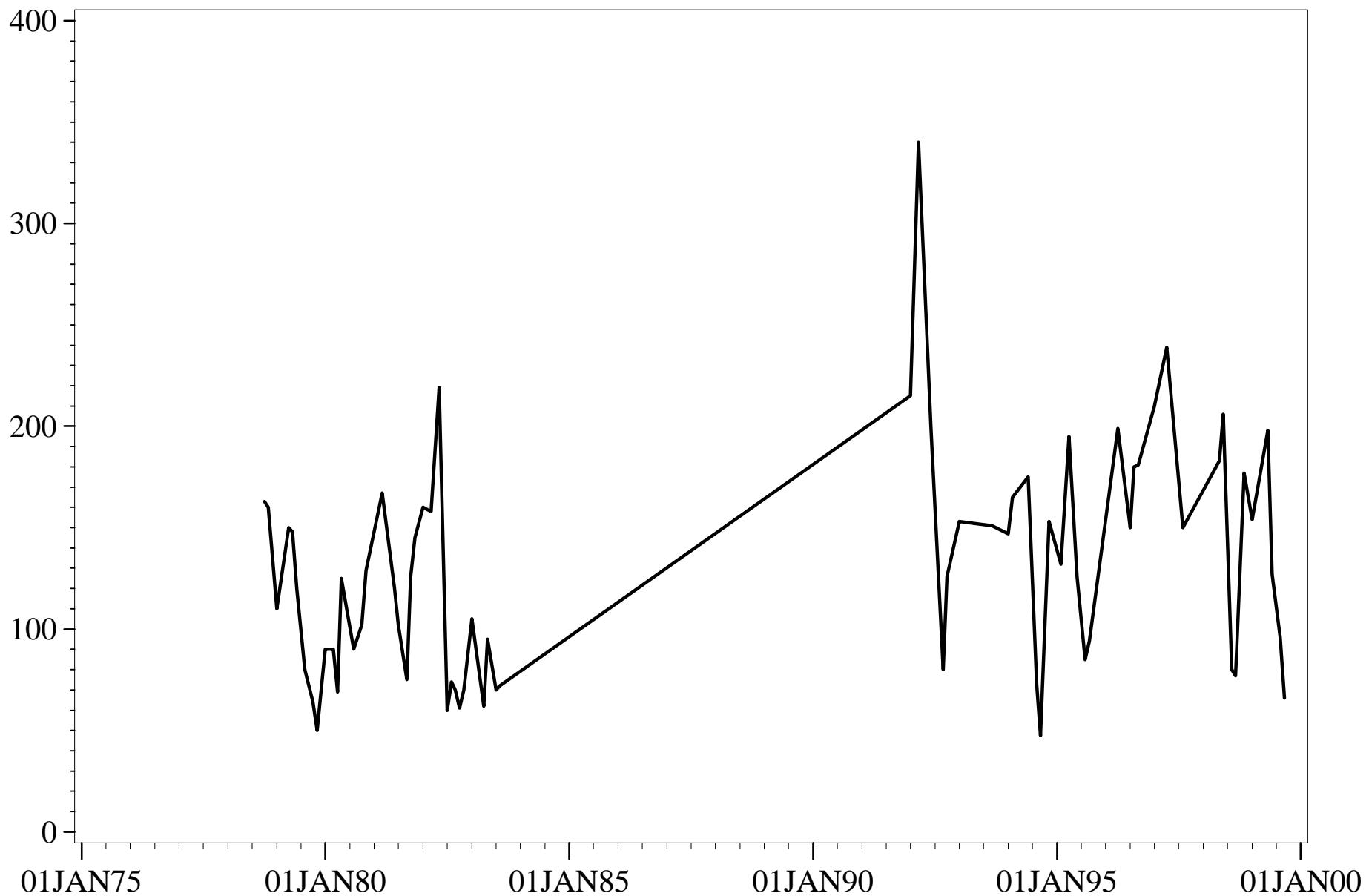
Adjusted for Seasonal Median and Detrended



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

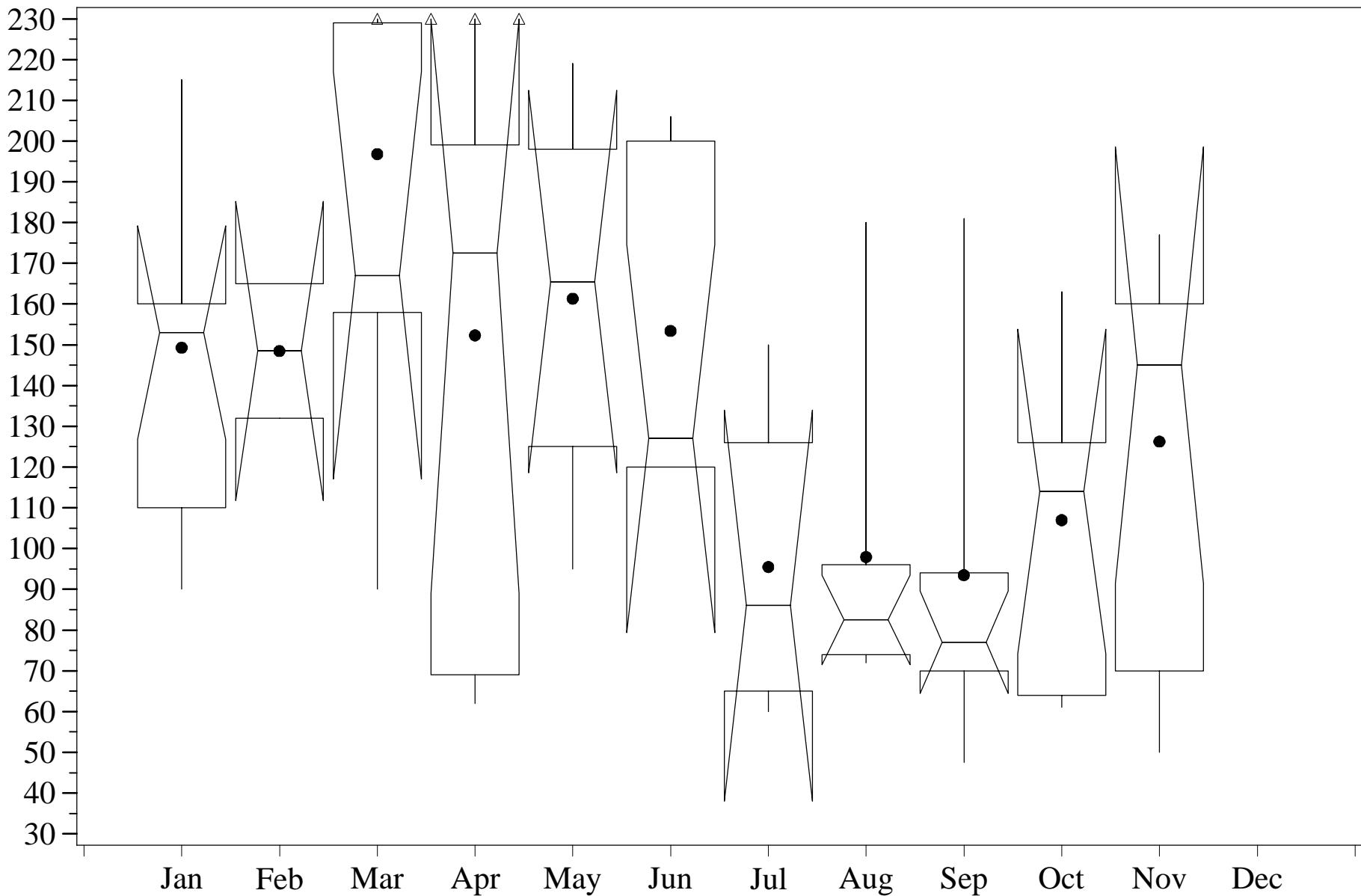
Conductivity
($\mu\text{S}/\text{cm}$)

Horse Creek Trends Appendix - Display 19
Monthly Data Time Series
for Surface Conductivity at USGS Station 02297155
Unadjusted for Seasonal Medians



Conductivity
($\mu\text{S}/\text{cm}$)

Horse Creek Trends Appendix - Display 20
Seasonal Univariate Statistics
for Surface Conductivity at USGS Station 02297155

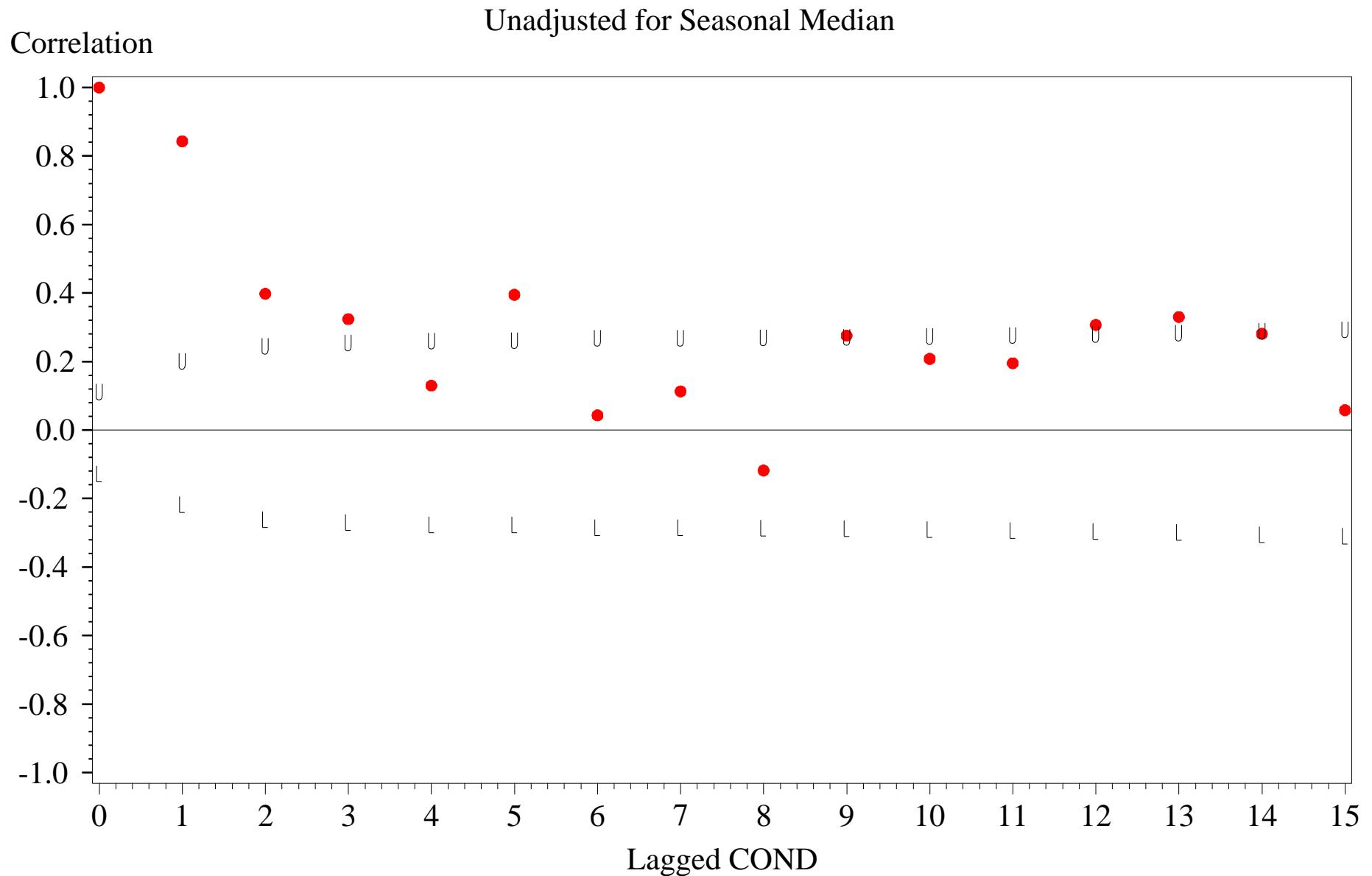


Horse Creek Trends Appendix - Display 21
Autocorrelation Statistics for Surface Conductivity at USGS Station 02297155

Unadjusted for Seasonal Medians

Lagged COND	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.060	0.120	-0.120
1	0.843	0.104	0.209	-0.209
2	0.398	0.127	0.253	-0.253
3	0.324	0.131	0.262	-0.262
4	0.130	0.134	0.268	-0.268
5	0.395	0.134	0.269	-0.269
6	0.043	0.139	0.277	-0.277
7	0.113	0.139	0.277	-0.277
8	-0.118	0.139	0.278	-0.278
9	0.276	0.139	0.279	-0.279
10	0.208	0.141	0.282	-0.282
11	0.195	0.142	0.285	-0.285
12	0.307	0.143	0.287	-0.287
13	0.330	0.146	0.291	-0.291
14	0.281	0.148	0.297	-0.297
15	0.058	0.150	0.301	-0.301

Horse Creek Trends Appendix - Display 22
Correlogram for Surface Conductivity at USGS Station 02297155



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Horse Creek Trends Appendix - Display 23

Seasonal Kendall Tau Trend Test Statistics
for Surface Conductivity at USGS Station 02297155

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.262	0.011	0.11	1.846

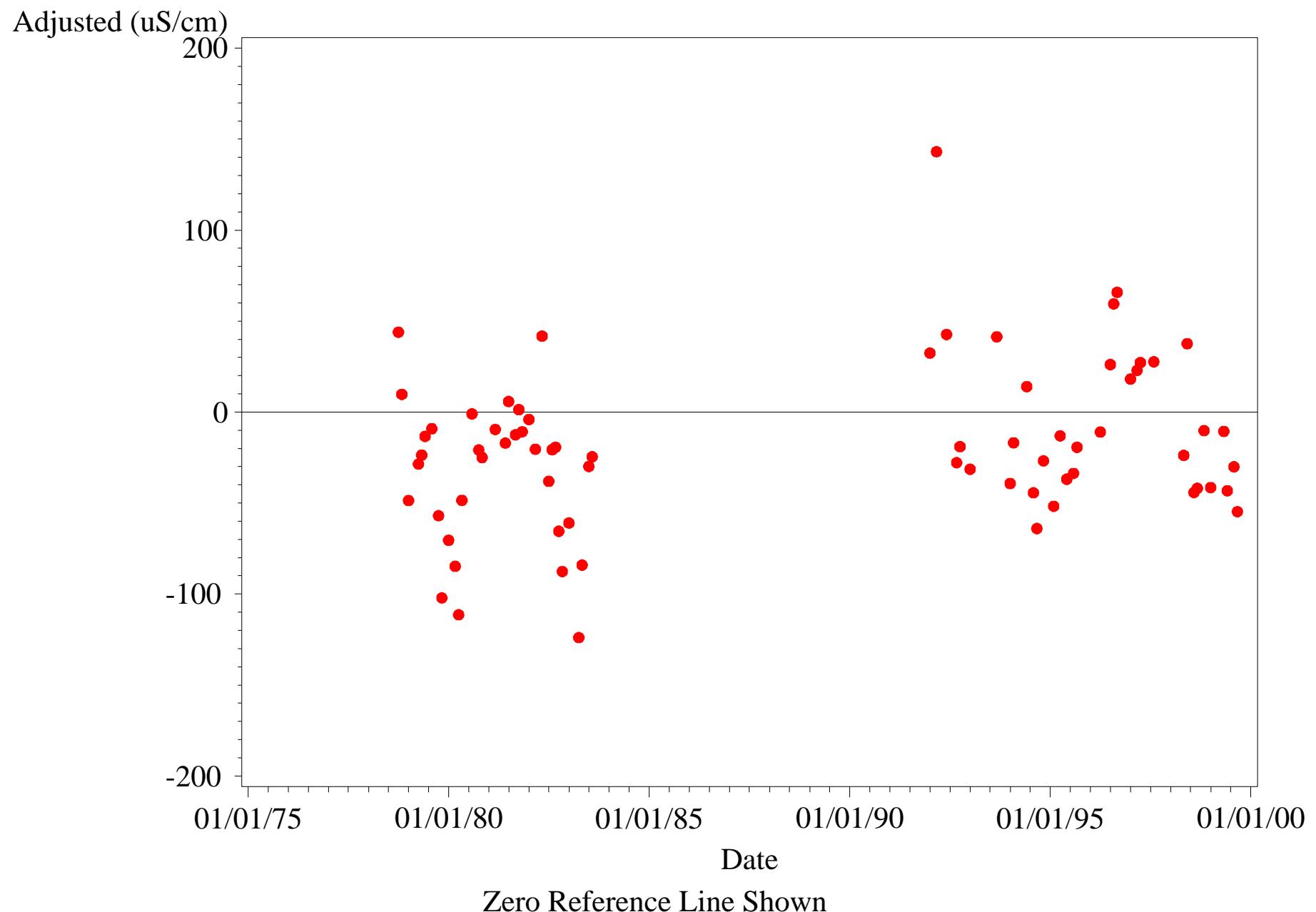
Horse Creek Trends Appendix - Display 24

Seasonal Kendall Tau Trend Test Statistics
for Surface Conductivity at USGS Station 02297155

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.26244	0.011278	0.11037	1.84615

Horse Creek Trends Appendix - Display 25
Time Series Plot of Surface Conductivity Data Adjusted for Season and Detrended
at USGS Station 02297155



Horse Creek Trends Appendix - Display 26
Autocorrelation Statistics for Surface Conductivity at USGS Station 02297155

Adjusted for Seasonal Median and Detrended

Lagged COND	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.060	0.120	-0.120
1	0.779	0.104	0.209	-0.209
2	0.433	0.124	0.247	-0.247
3	0.411	0.129	0.258	-0.258
4	0.358	0.134	0.267	-0.267
5	0.466	0.137	0.274	-0.274
6	0.344	0.143	0.285	-0.285
7	0.236	0.146	0.291	-0.291
8	0.129	0.147	0.294	-0.294
9	0.182	0.147	0.295	-0.295
10	0.162	0.148	0.297	-0.297
11	-0.084	0.149	0.298	-0.298
12	-0.176	0.149	0.298	-0.298
13	-0.203	0.150	0.300	-0.300
14	-0.059	0.151	0.302	-0.302
15	-0.073	0.151	0.302	-0.302

Horse Creek Trends Appendix - Display 27

Correlogram for Surface Conductivity at USGS Station 02297155

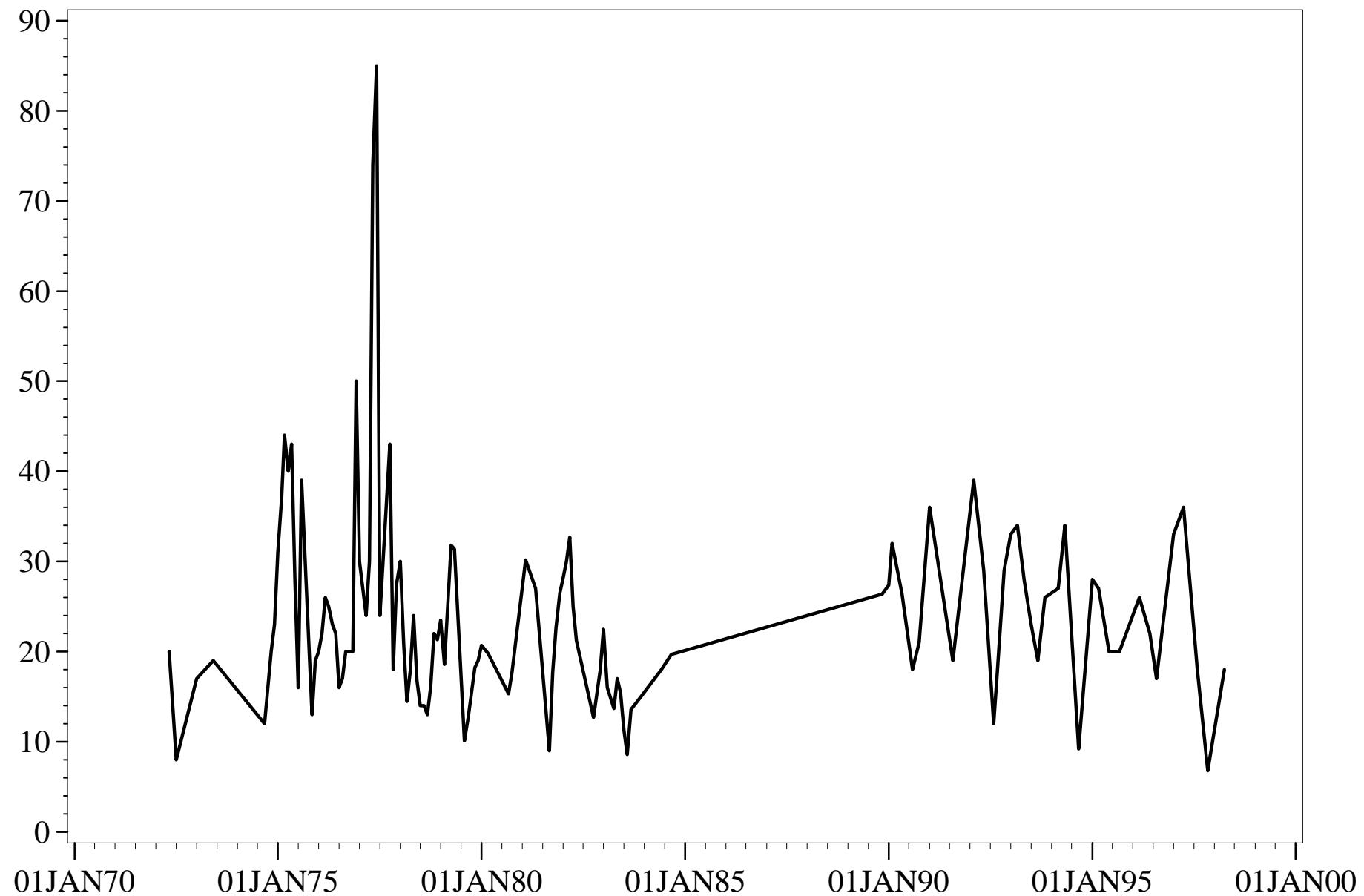
Adjusted for Seasonal Median and Detrended

Lagged COND	Correlation	Label
0	1.00	
1	0.78	
2	0.44	U
3	0.41	U
4	0.37	U
5	0.46	U
6	0.35	U
7	0.24	U
8	0.14	
9	0.18	U
10	0.16	U
11	-0.11	L
12	-0.21	L
13	-0.20	L
14	-0.12	L
15	-0.11	L

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

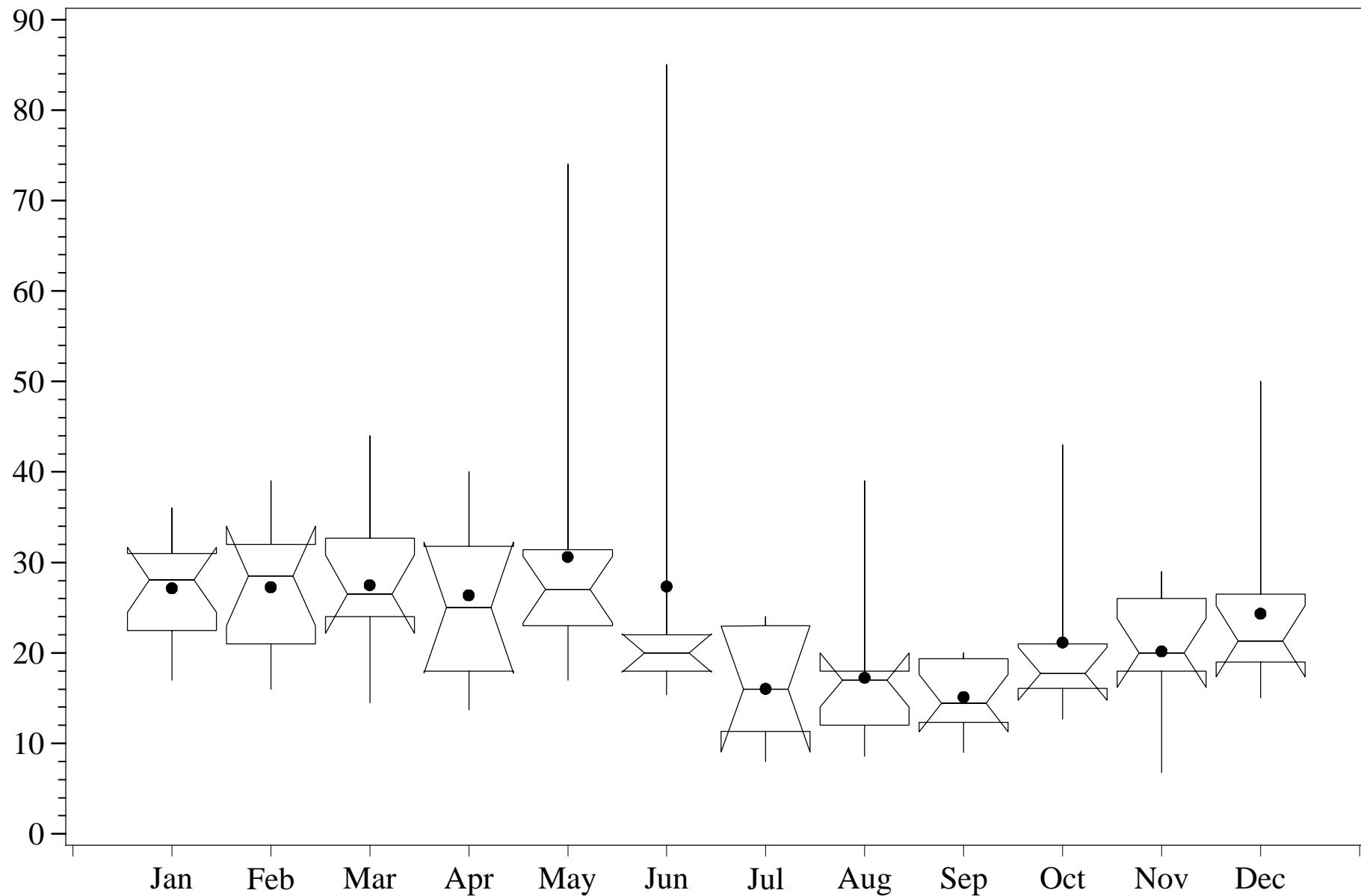
Chloride
(mg/L)

Horse Creek Trends Appendix - Display 28
Monthly Data Time Series
for Surface Chloride at FDEP Station 25020111
Unadjusted for Seasonal Medians



Chloride
(mg/L)

Horse Creek Trends Appendix - Display 29
Seasonal Univariate Statistics
for Surface Chloride at FDEP Station 25020111



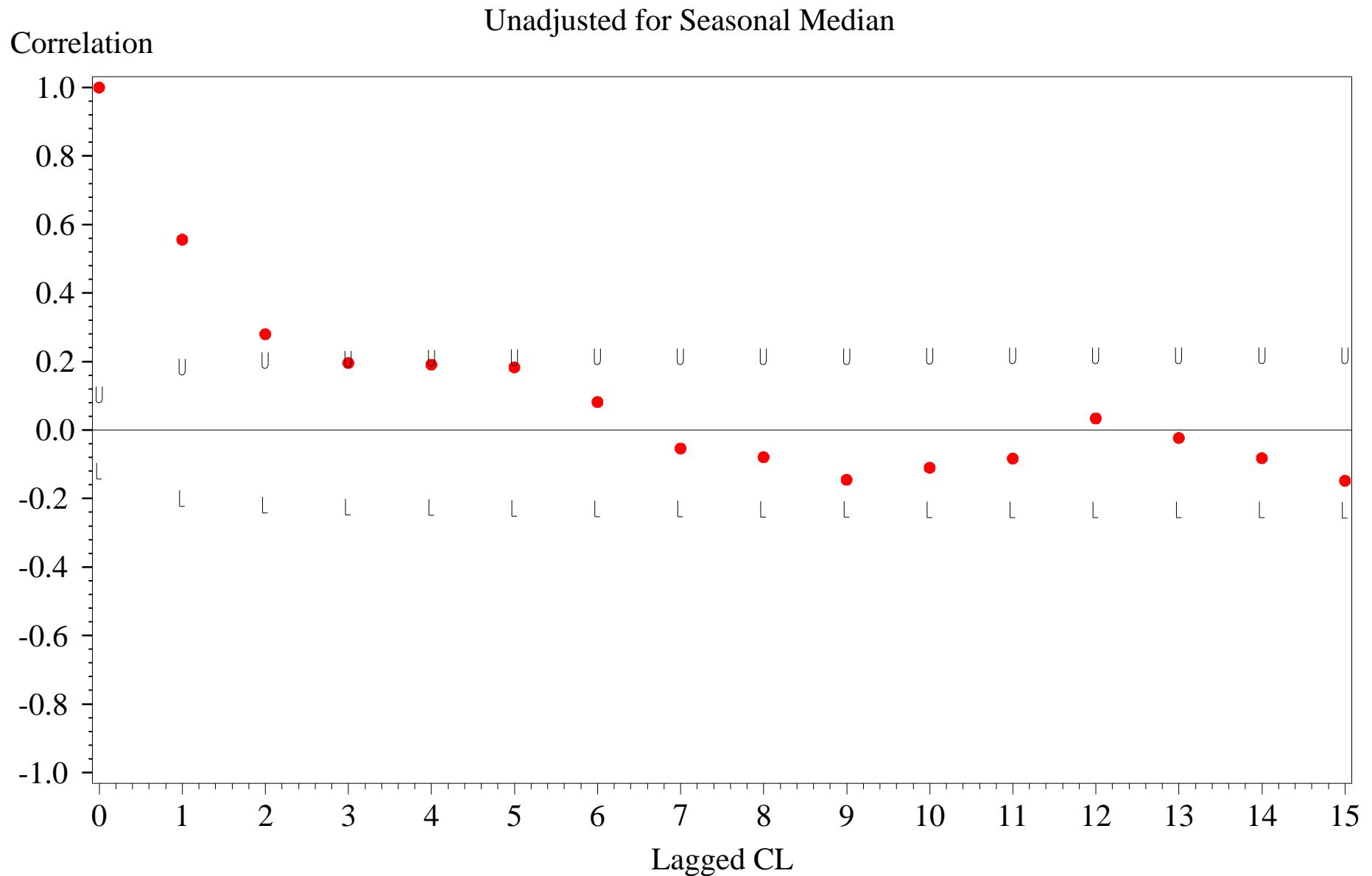
Horse Creek Trends Appendix - Display 30
Autocorrelation Statistics for Surface Chloride at FDEP Station 25020111

Unadjusted for Seasonal Medians

Lagged CL	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.556	0.096	0.192	-0.192
2	0.280	0.106	0.211	-0.211
3	0.196	0.108	0.216	-0.216
4	0.191	0.109	0.218	-0.218
5	0.183	0.110	0.220	-0.220
6	0.082	0.111	0.222	-0.222
7	-0.054	0.111	0.222	-0.222
8	-0.079	0.111	0.223	-0.223
9	-0.145	0.111	0.223	-0.223
10	-0.110	0.112	0.224	-0.224
11	-0.083	0.112	0.225	-0.225
12	0.034	0.113	0.225	-0.225
13	-0.023	0.113	0.225	-0.225
14	-0.082	0.113	0.225	-0.225
15	-0.148	0.113	0.226	-0.226

Horse Creek Trends Appendix - Display 31

Correlogram for Surface Chloride at FDEP Station 25020111



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Horse Creek Trends Appendix - Display 32

Seasonal Kendall Tau Trend Test Statistics
for Surface Chloride at FDEP Station 25020111

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.078	0.287	0.515	0.118

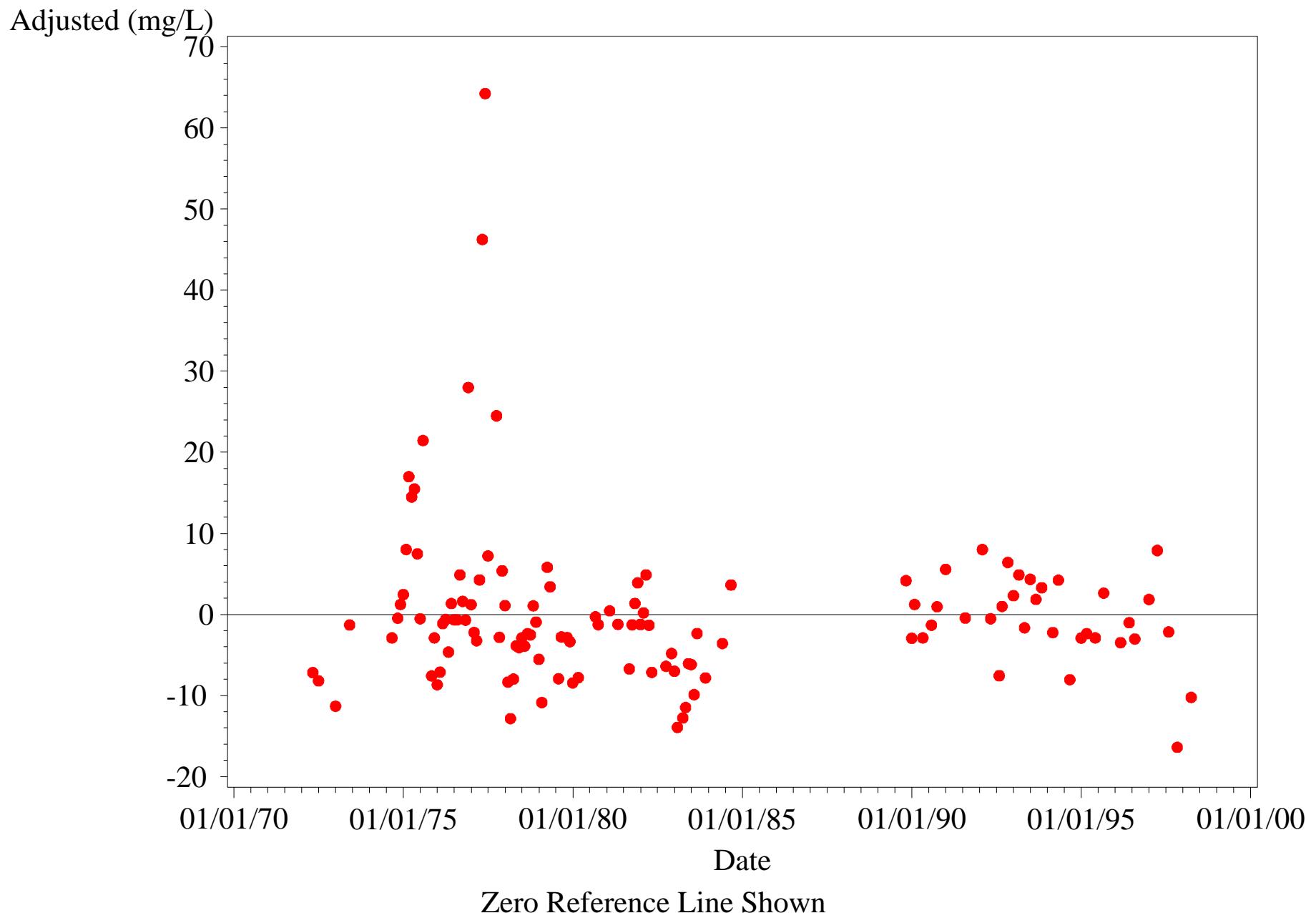
Horse Creek Trends Appendix - Display 33

Seasonal Kendall Tau Trend Test Statistics
for Surface Chloride at FDEP Station 25020111

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.078261	0.28699	0.51496	0.11818

Horse Creek Trends Appendix - Display 34
Time Series Plot of Surface Chloride Data Adjusted for Season and Detrended
at FDEP Station 25020111



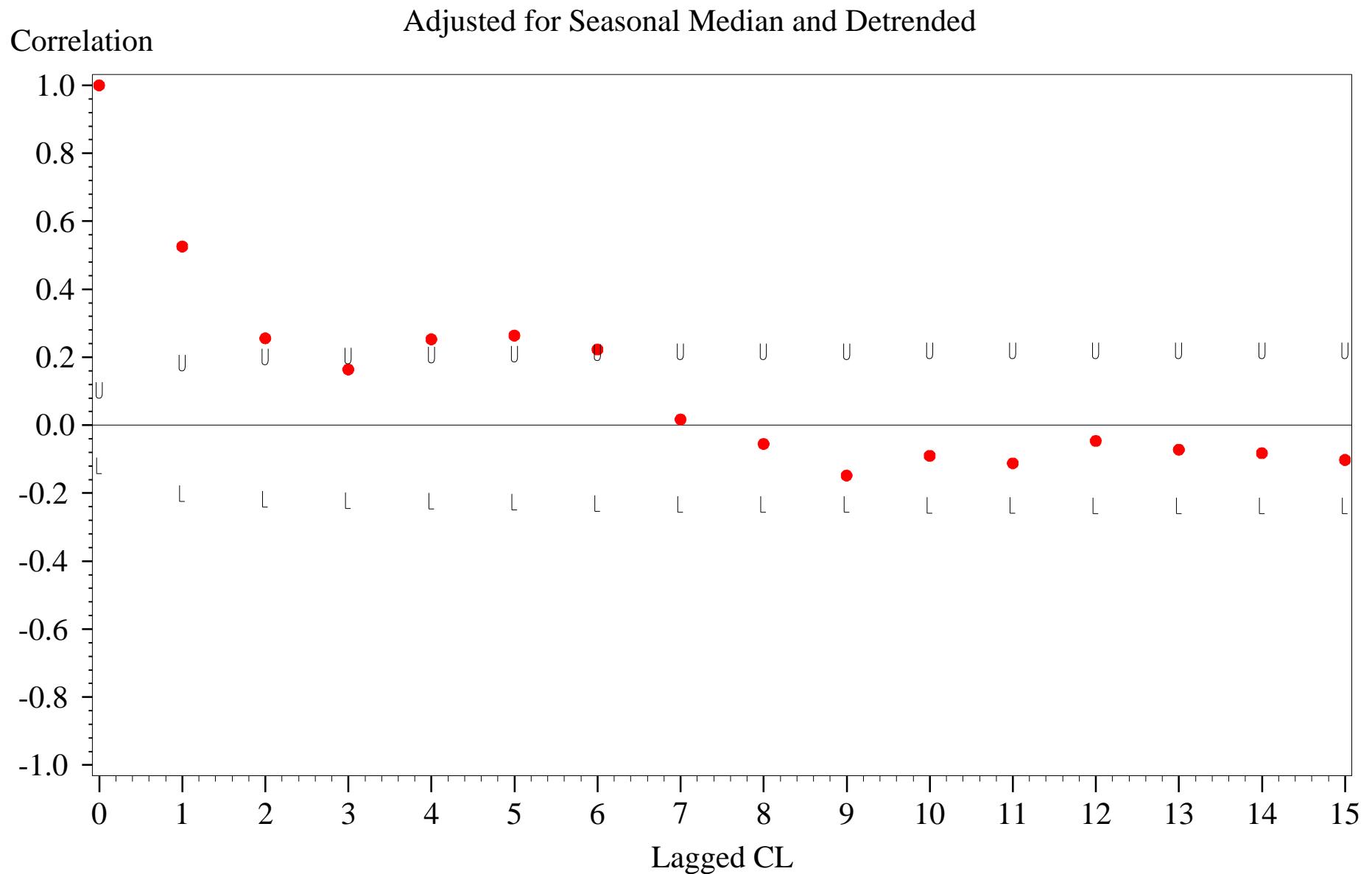
Horse Creek Trends Appendix - Display 35

Autocorrelation Statistics for Surface Chloride at FDEP Station 25020111

Adjusted for Seasonal Median and Detrended

Lagged CL	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.526	0.096	0.192	-0.192
2	0.256	0.105	0.209	-0.209
3	0.164	0.107	0.213	-0.213
4	0.253	0.107	0.215	-0.215
5	0.264	0.109	0.218	-0.218
6	0.223	0.111	0.222	-0.222
7	0.017	0.113	0.225	-0.225
8	-0.055	0.113	0.225	-0.225
9	-0.148	0.113	0.225	-0.225
10	-0.090	0.113	0.227	-0.227
11	-0.112	0.113	0.227	-0.227
12	-0.046	0.114	0.228	-0.228
13	-0.072	0.114	0.228	-0.228
14	-0.082	0.114	0.228	-0.228
15	-0.102	0.114	0.228	-0.228

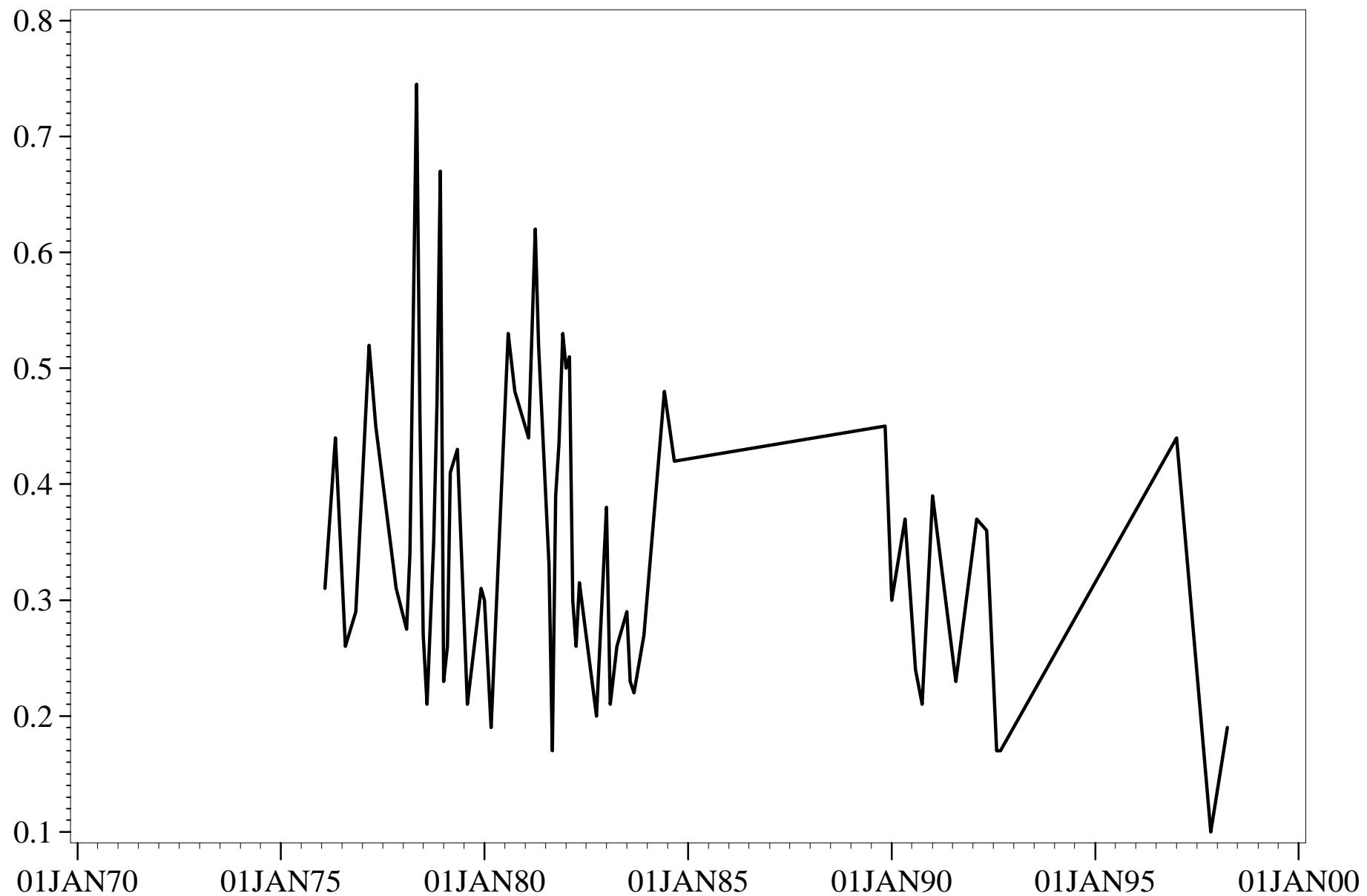
Horse Creek Trends Appendix - Display 36
Correlogram for Surface Chloride at FDEP Station 25020111



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

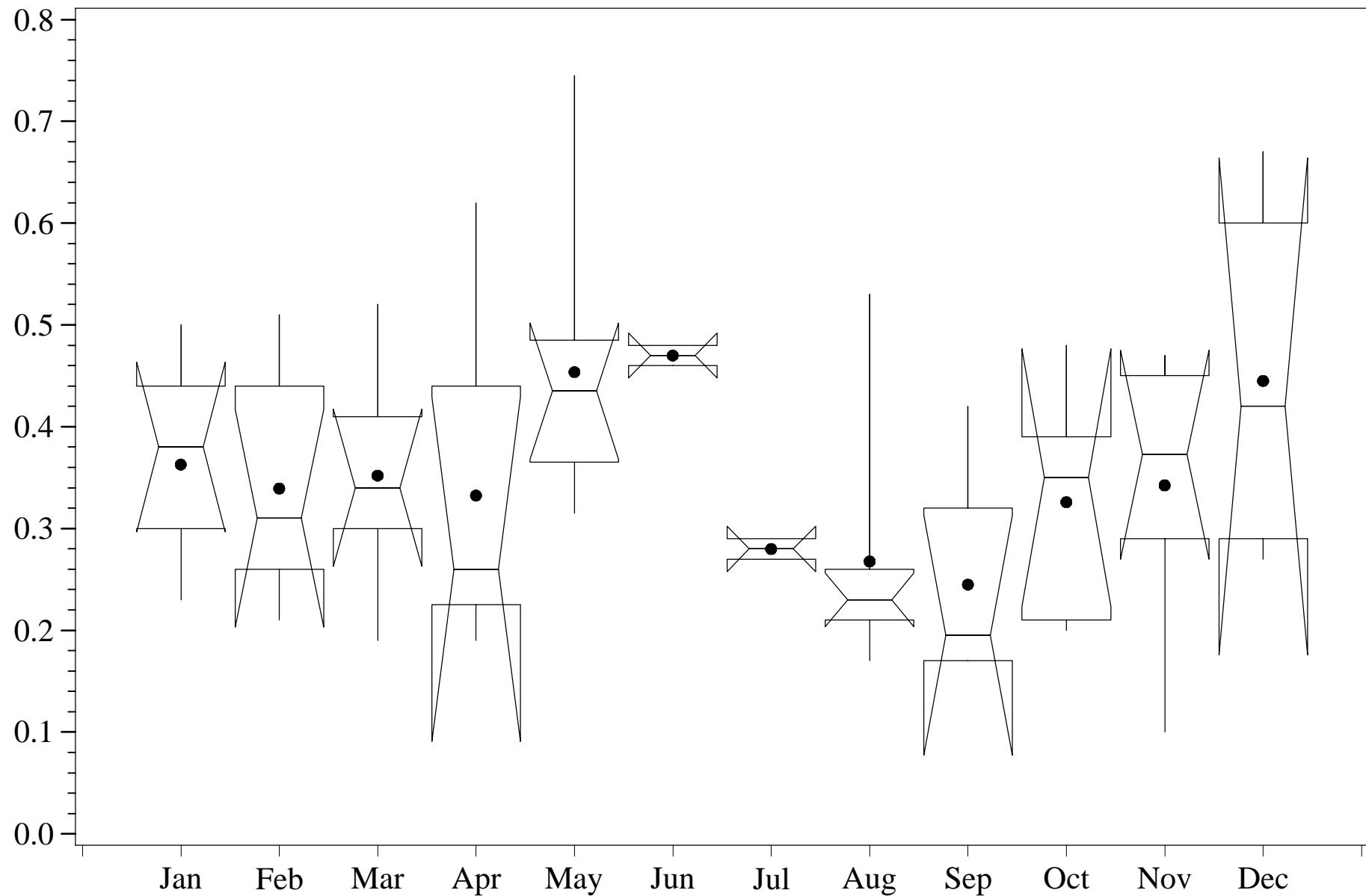
Fluoride
(mg/l)

Horse Creek Trends Appendix - Display 37
Monthly Data Time Series
for Surface Fluoride at FDEP Station 25020111
Unadjusted for Seasonal Medians



Fluoride
(mg/l)

Horse Creek Trends Appendix - Display 38
Seasonal Univariate Statistics
for Surface Fluoride at FDEP Station 25020111

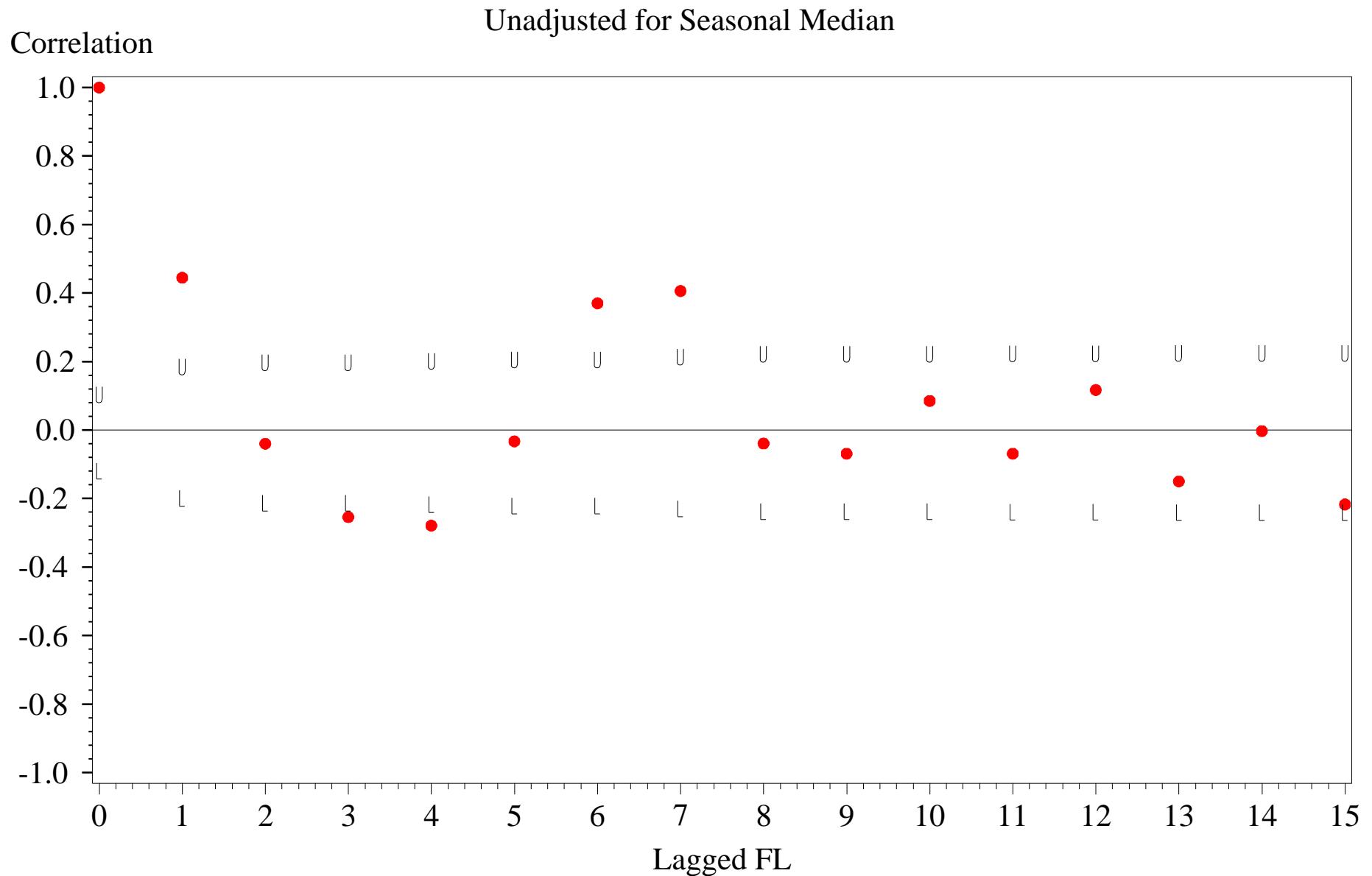


Horse Creek Trends Appendix - Display 39
Autocorrelation Statistics for Surface Fluoride at FDEP Station 25020111

Unadjusted for Seasonal Medians

Lagged FL	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.445	0.096	0.192	-0.192
2	-0.040	0.102	0.205	-0.205
3	-0.254	0.102	0.205	-0.205
4	-0.279	0.104	0.209	-0.209
5	-0.033	0.107	0.213	-0.213
6	0.370	0.107	0.213	-0.213
7	0.406	0.111	0.221	-0.221
8	-0.039	0.115	0.230	-0.230
9	-0.069	0.115	0.230	-0.230
10	0.085	0.115	0.230	-0.230
11	-0.069	0.115	0.231	-0.231
12	0.117	0.116	0.231	-0.231
13	-0.150	0.116	0.232	-0.232
14	-0.003	0.117	0.233	-0.233
15	-0.217	0.117	0.233	-0.233

Horse Creek Trends Appendix - Display 40
Correlogram for Surface Fluoride at FDEP Station 25020111



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Horse Creek Trends Appendix - Display 41

Seasonal Kendall Tau Trend Test Statistics
for Surface Fluoride at FDEP Station 25020111

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.149	0.206	0.25	-.005

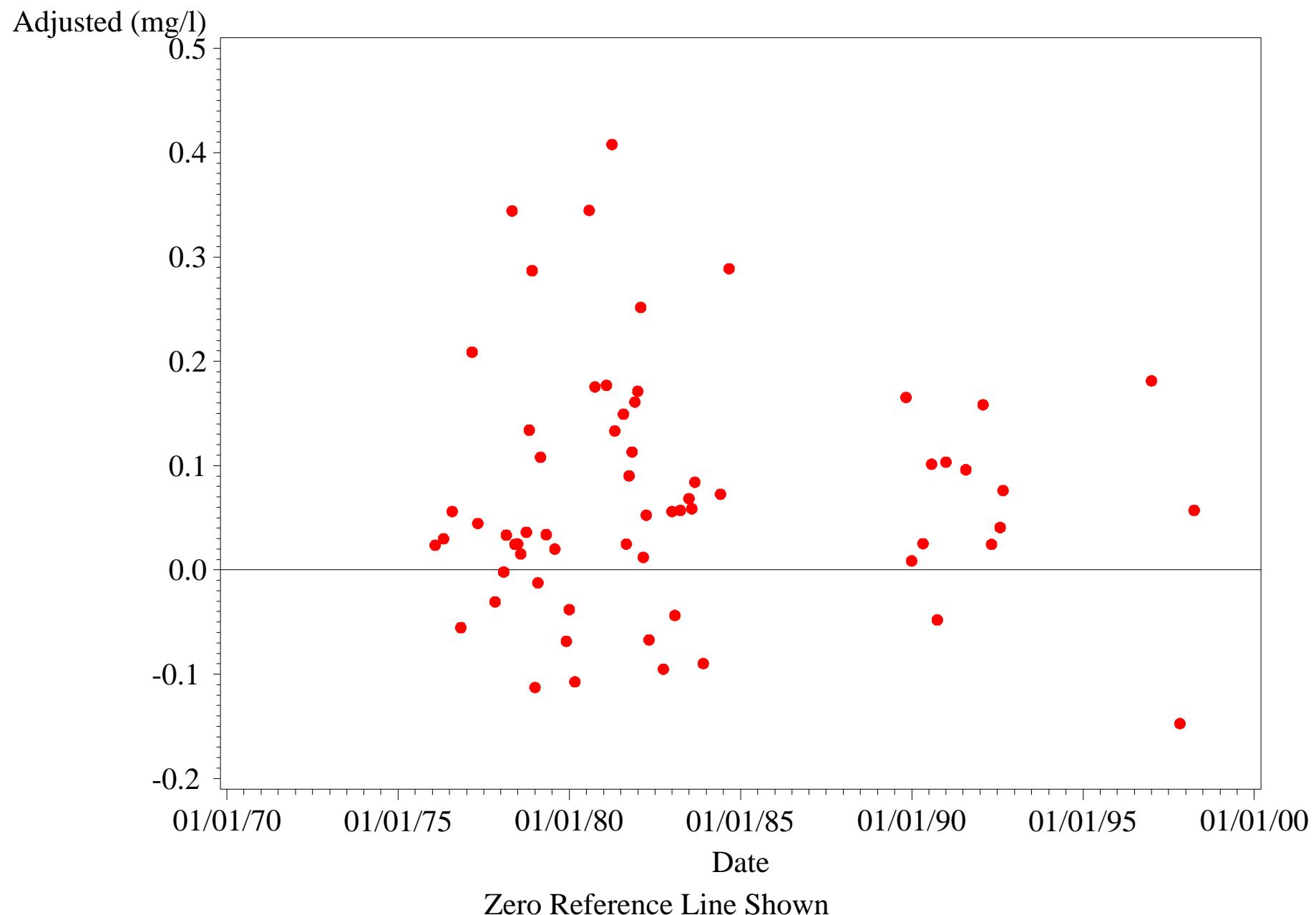
Horse Creek Trends Appendix - Display 42

Seasonal Kendall Tau Trend Test Statistics
for Surface Fluoride at FDEP Station 25020111

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.14907	0.20593	0.25014	-.00466667

Horse Creek Trends Appendix - Display 43
Time Series Plot of Surface Fluoride Data Adjusted for Season and Detrended
at FDEP Station 25020111

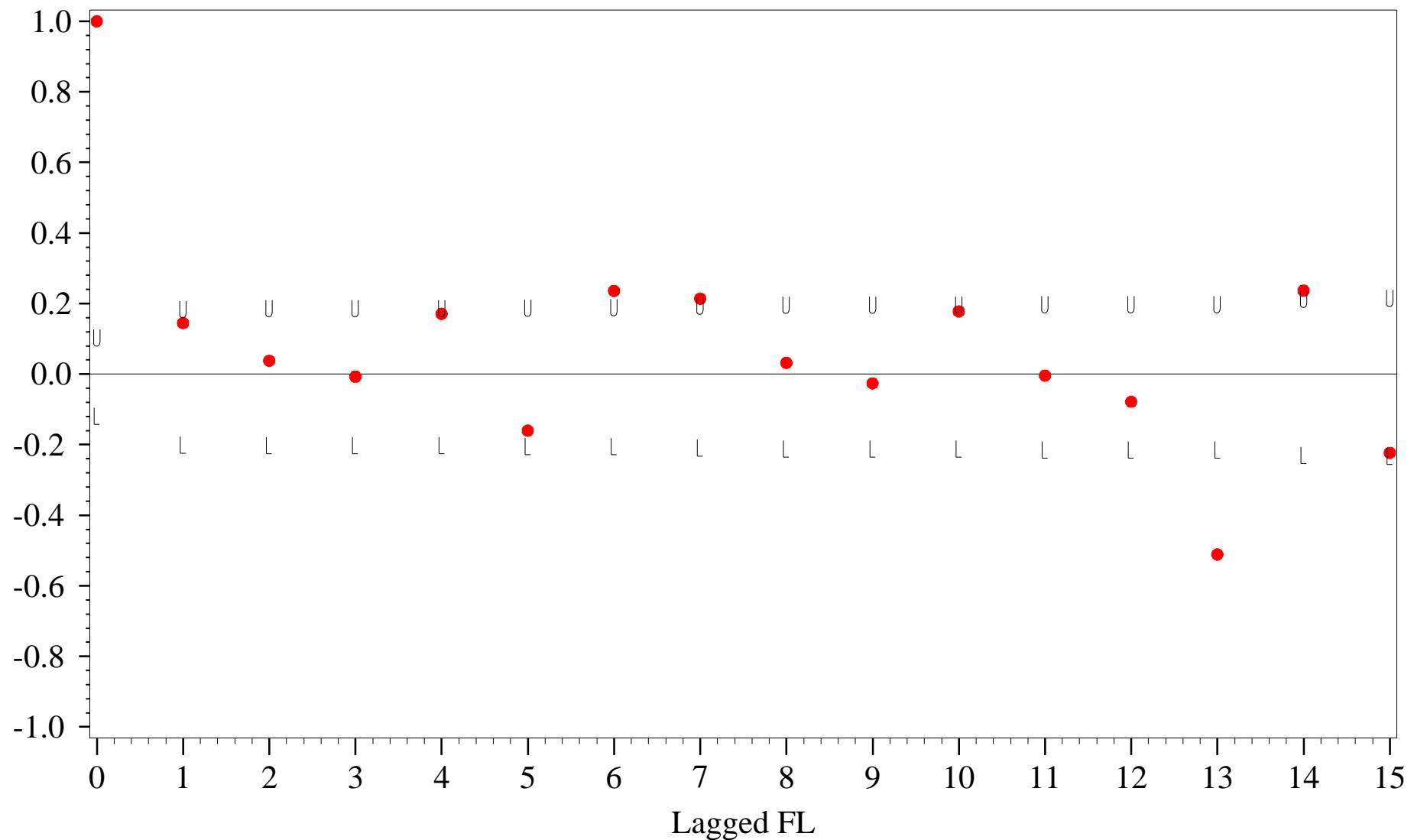


Horse Creek Trends Appendix - Display 44
Autocorrelation Statistics for Surface Fluoride at FDEP Station 25020111
Adjusted for Seasonal Median and Detrended

Lagged FL	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.145	0.096	0.192	-0.192
2	0.038	0.097	0.194	-0.194
3	-0.007	0.097	0.194	-0.194
4	0.171	0.097	0.194	-0.194
5	-0.160	0.098	0.196	-0.196
6	0.236	0.099	0.197	-0.197
7	0.214	0.100	0.201	-0.201
8	0.032	0.102	0.204	-0.204
9	-0.026	0.102	0.204	-0.204
10	0.178	0.102	0.204	-0.204
11	-0.004	0.103	0.206	-0.206
12	-0.078	0.103	0.206	-0.206
13	-0.511	0.103	0.206	-0.206
14	0.237	0.111	0.221	-0.221
15	-0.223	0.112	0.224	-0.224

Horse Creek Trends Appendix - Display 45
Correlogram for Surface Fluoride at FDEP Station 25020111

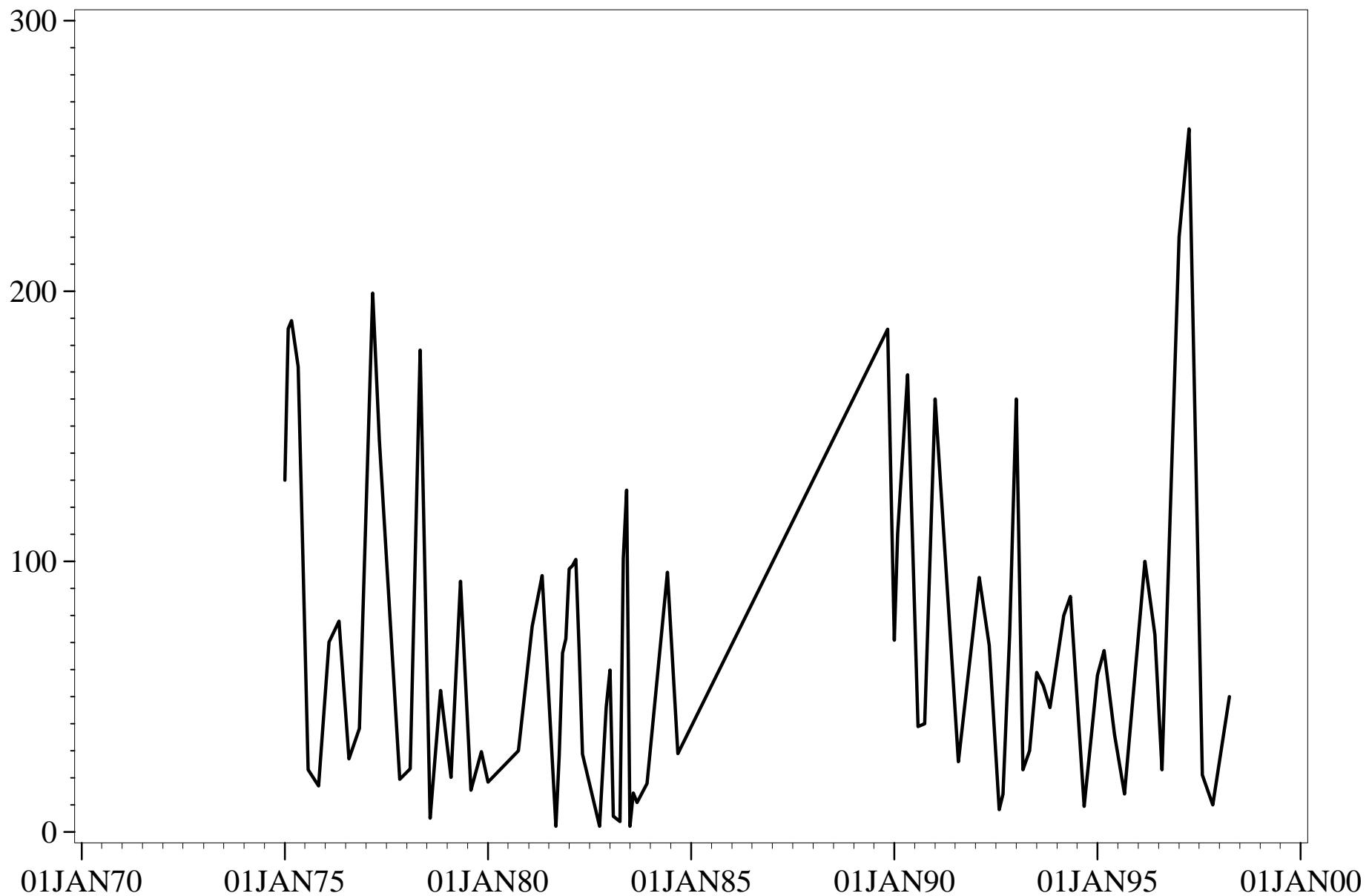
Correlation
Adjusted for Seasonal Median and Detrended



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

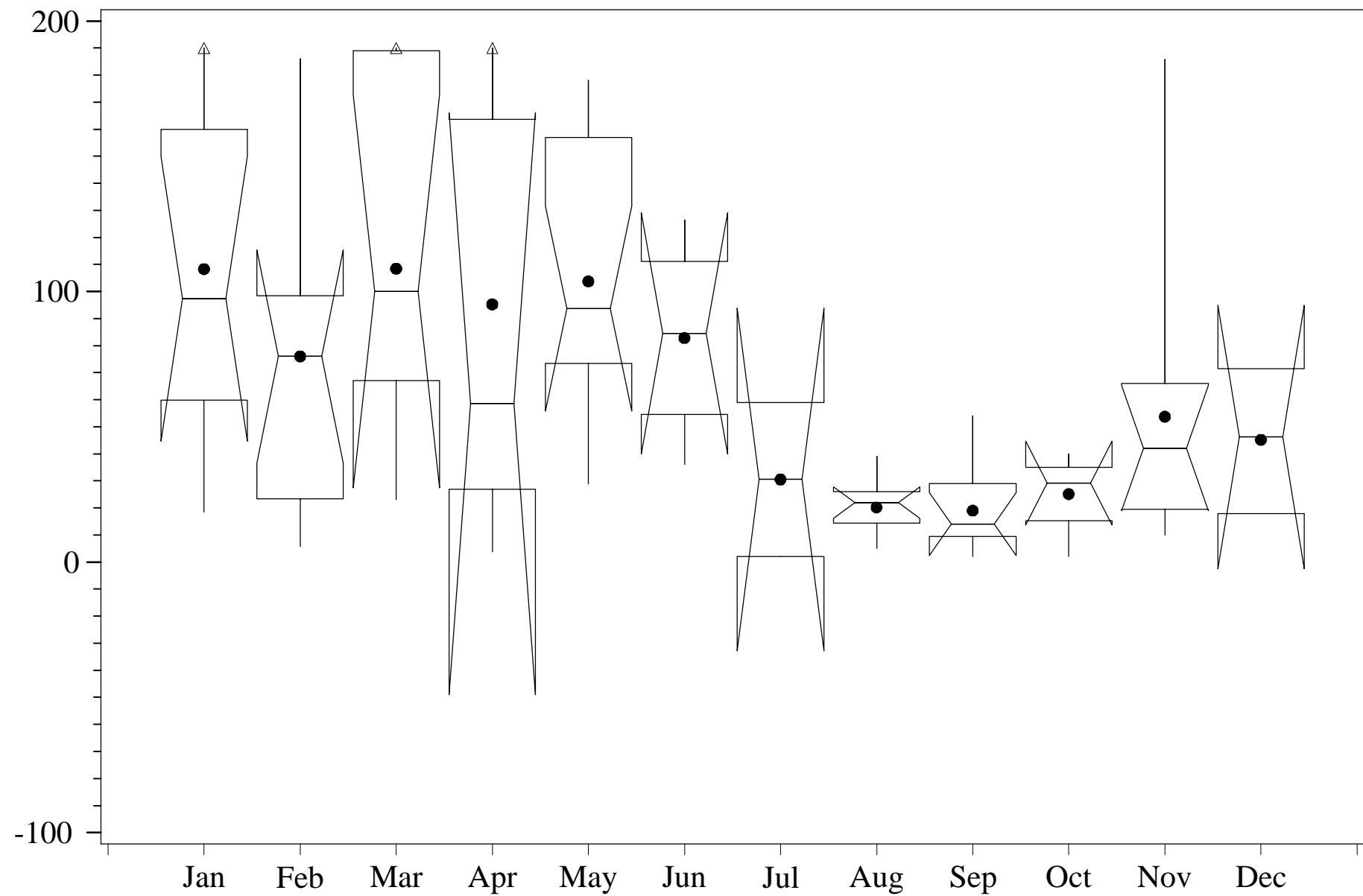
Sulphate
(mg/L)

Horse Creek Trends Appendix - Display 46
Monthly Data Time Series
for Surface Sulphate at FDEP Station 25020111
Unadjusted for Seasonal Medians



Horse Creek Trends Appendix - Display 47
Seasonal Univariate Statistics
for Surface Sulphate at FDEP Station 25020111

Sulphate
(mg/L)

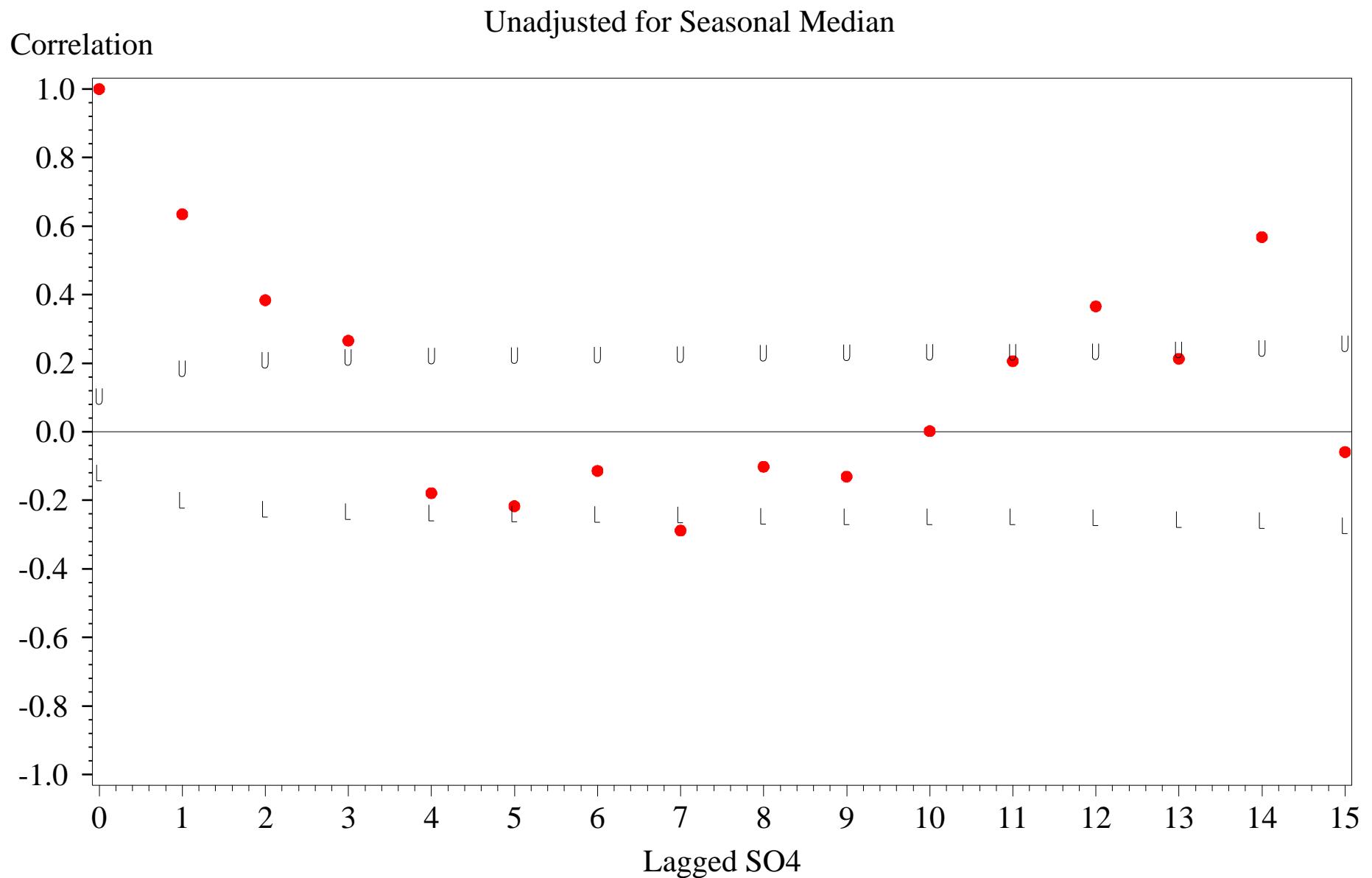


Horse Creek Trends Appendix - Display 48
Autocorrelation Statistics for Surface Sulphate at FDEP Station 25020111

Unadjusted for Seasonal Medians

Lagged SO4	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.635	0.096	0.192	-0.192
2	0.384	0.108	0.217	-0.217
3	0.266	0.113	0.225	-0.225
4	-0.179	0.114	0.229	-0.229
5	-0.217	0.115	0.231	-0.231
6	-0.114	0.117	0.233	-0.233
7	-0.288	0.117	0.234	-0.234
8	-0.102	0.119	0.238	-0.238
9	-0.131	0.119	0.239	-0.239
10	0.002	0.120	0.240	-0.240
11	0.206	0.120	0.240	-0.240
12	0.366	0.121	0.242	-0.242
13	0.213	0.124	0.248	-0.248
14	0.568	0.125	0.251	-0.251
15	-0.059	0.133	0.266	-0.266

Horse Creek Trends Appendix - Display 49
Correlogram for Surface Sulphate at FDEP Station 25020111



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Horse Creek Trends Appendix - Display 50

Seasonal Kendall Tau Trend Test Statistics
for Surface Sulphate at FDEP Station 25020111

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.027	0.8	0.797	-0.111

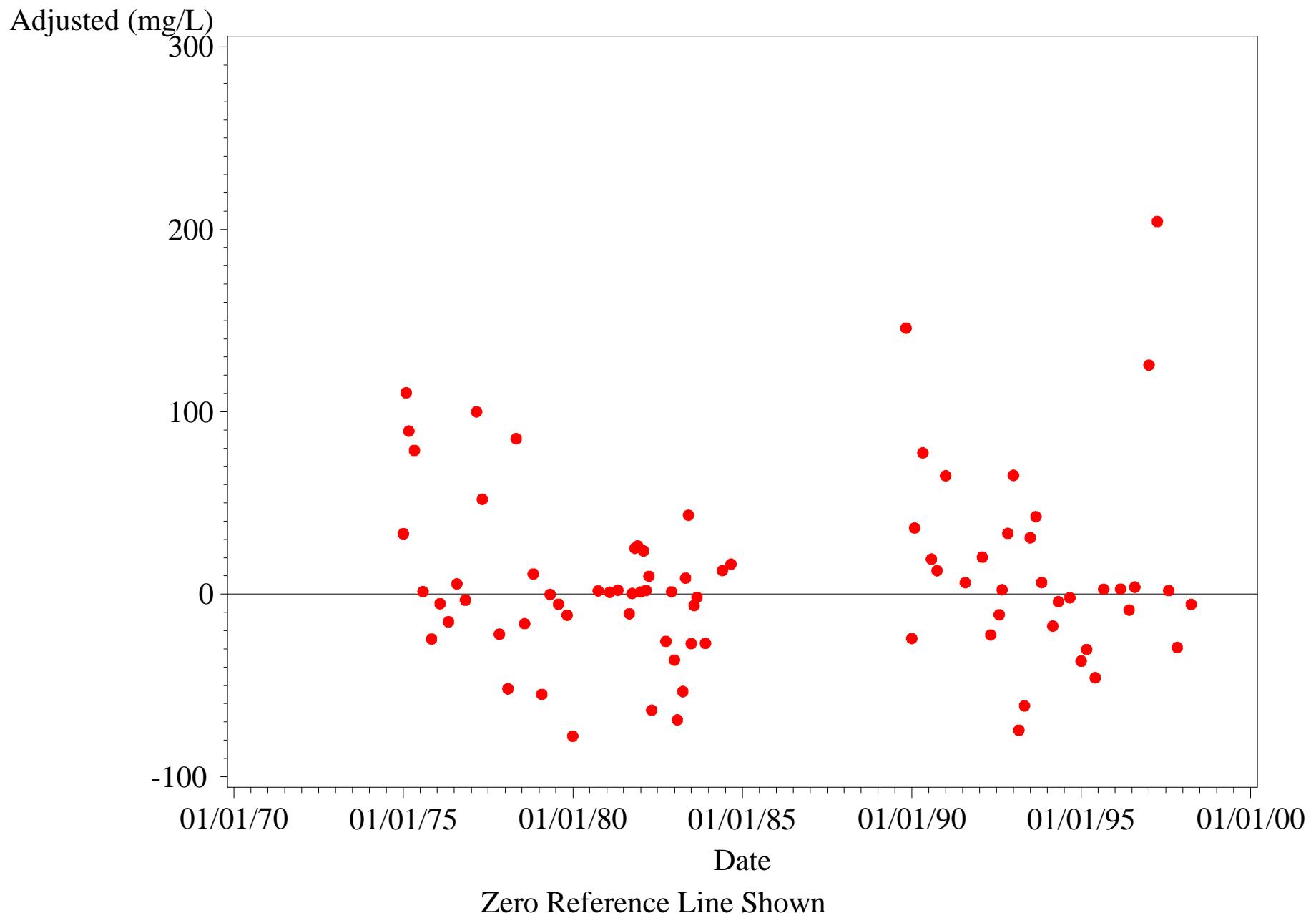
Horse Creek Trends Appendix - Display 51

Seasonal Kendall Tau Trend Test Statistics
for Surface Sulphate at FDEP Station 25020111

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.027397	0.80007	0.79737	-0.11136

Horse Creek Trends Appendix - Display 52
Time Series Plot of Surface Sulphate Data Adjusted for Season and Detrended
at FDEP Station 25020111



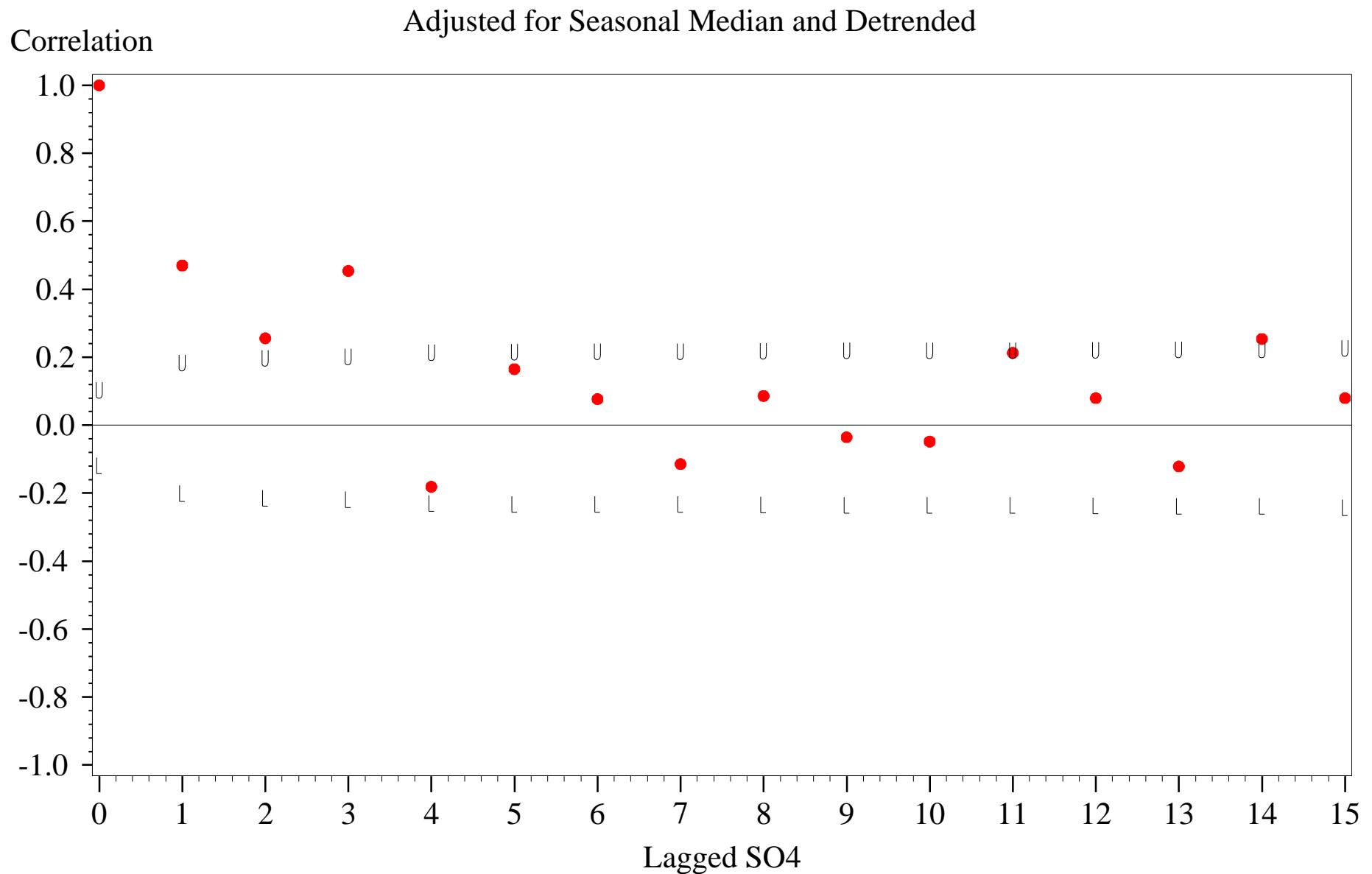
Horse Creek Trends Appendix - Display 53

Autocorrelation Statistics for Surface Sulphate at FDEP Station 25020111

Adjusted for Seasonal Median and Detrended

Lagged SO4	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.470	0.096	0.192	-0.192
2	0.256	0.103	0.206	-0.206
3	0.454	0.105	0.210	-0.210
4	-0.181	0.111	0.222	-0.222
5	0.165	0.112	0.224	-0.224
6	0.077	0.113	0.225	-0.225
7	-0.114	0.113	0.225	-0.225
8	0.086	0.113	0.226	-0.226
9	-0.035	0.113	0.227	-0.227
10	-0.048	0.113	0.227	-0.227
11	0.213	0.113	0.227	-0.227
12	0.080	0.115	0.229	-0.229
13	-0.121	0.115	0.230	-0.230
14	0.254	0.115	0.230	-0.230
15	0.080	0.117	0.234	-0.234

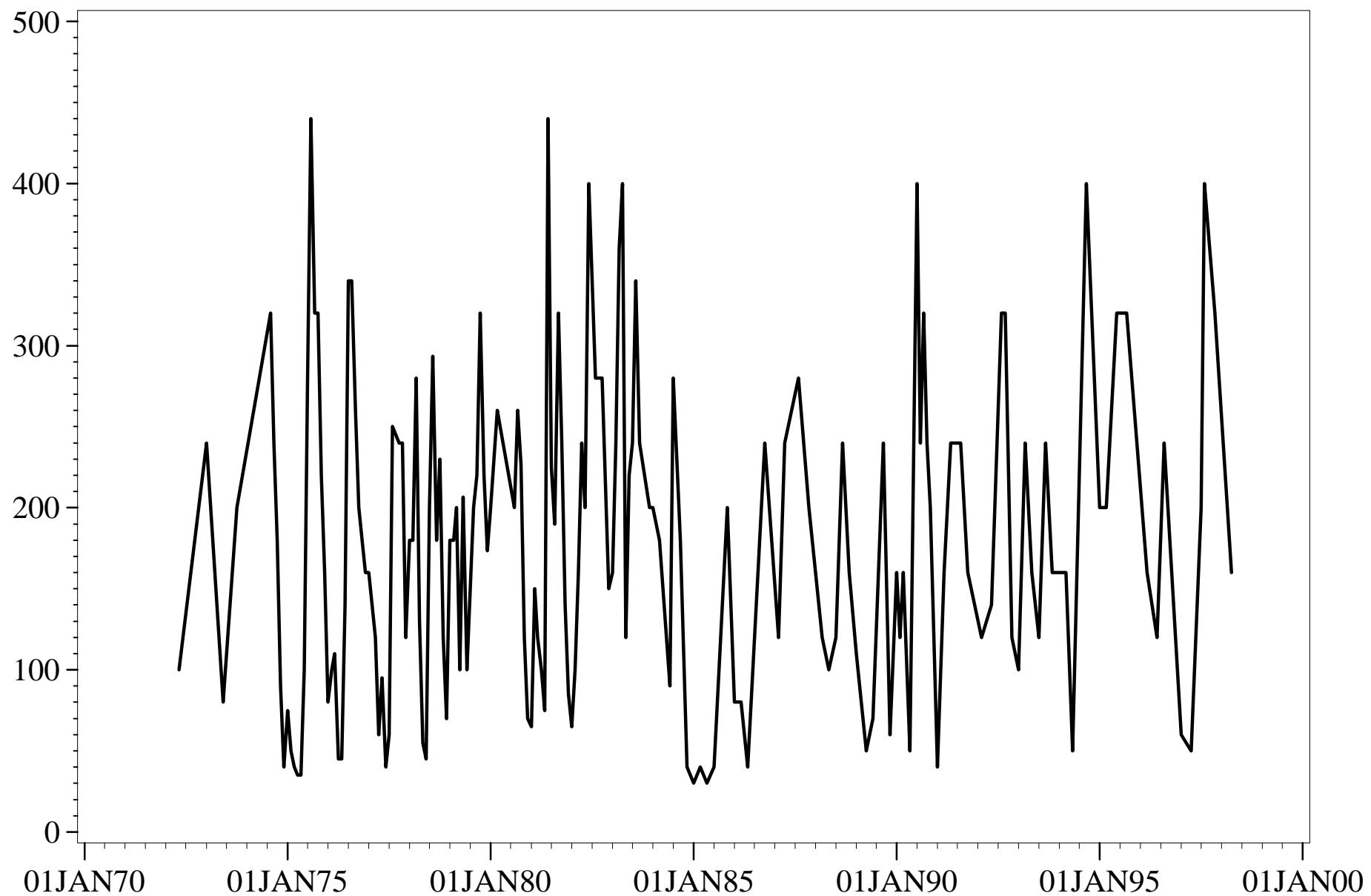
Horse Creek Trends Appendix - Display 54
Correlogram for Surface Sulphate at FDEP Station 25020111



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

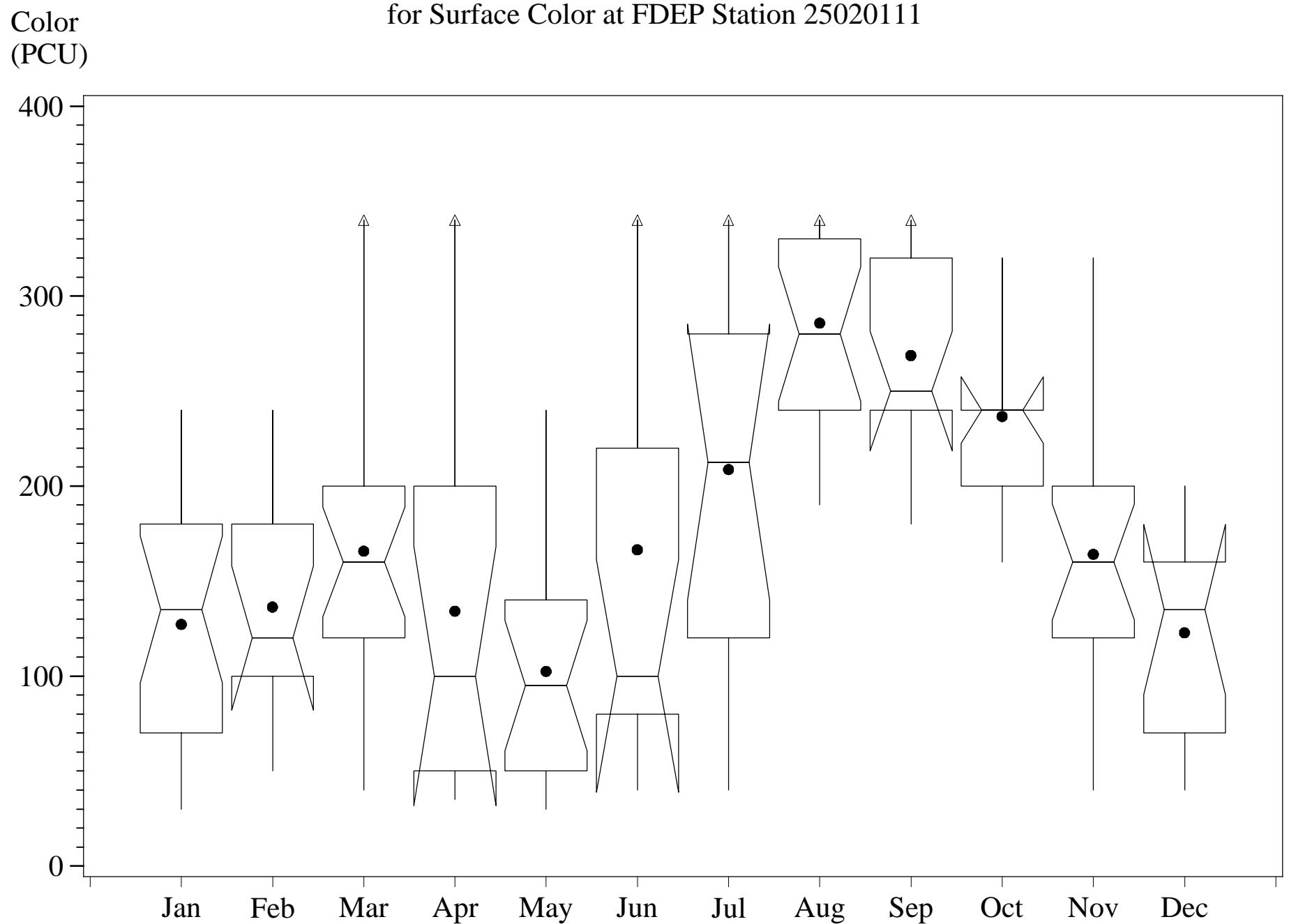
Color
(PCU)

Horse Creek Trends Appendix - Display 55
Monthly Data Time Series
for Surface Color at FDEP Station 25020111
Unadjusted for Seasonal Medians



Horse Creek Trends Appendix - Display 56

Seasonal Univariate Statistics for Surface Color at FDEP Station 25020111

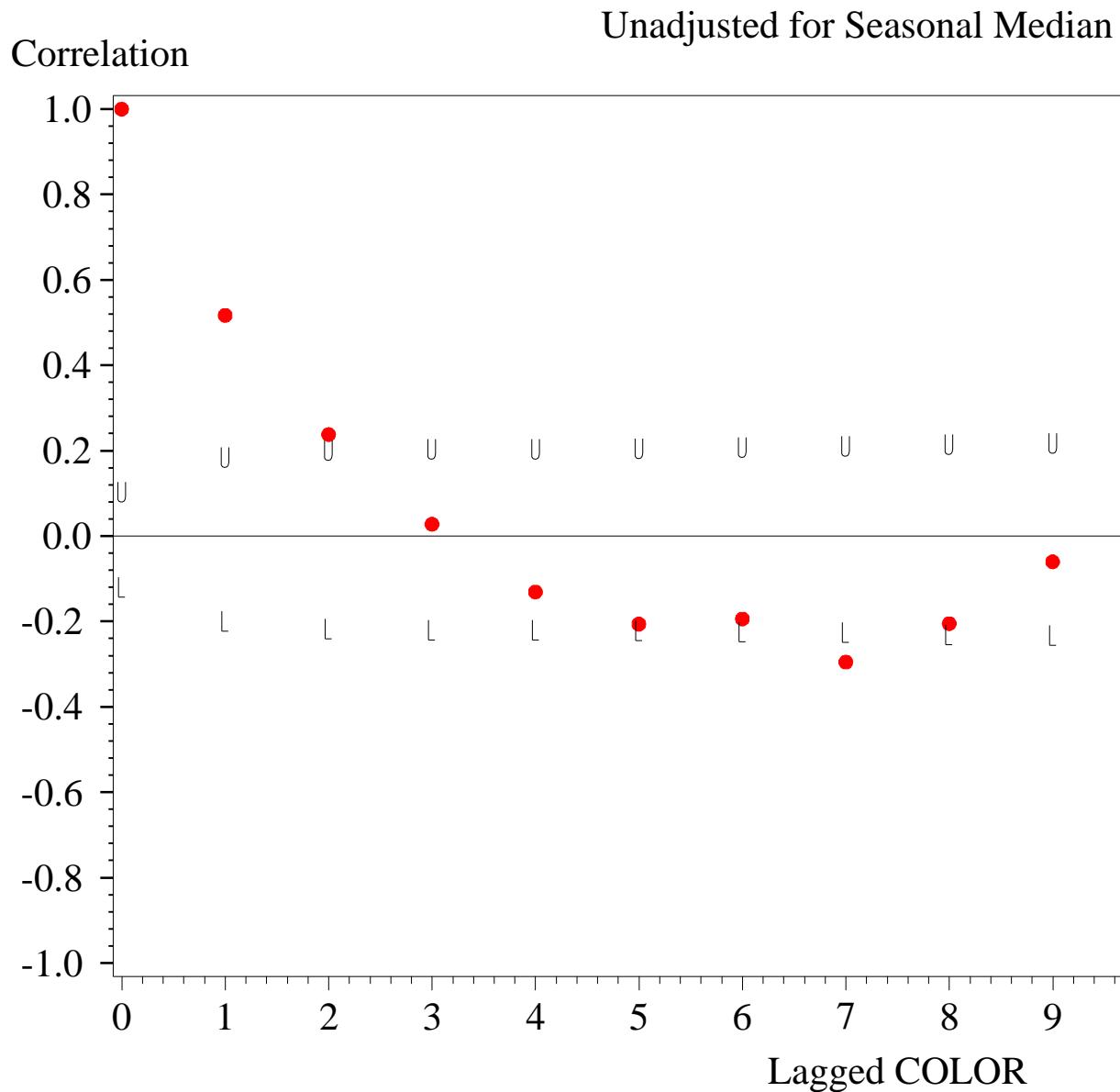


Horse Creek Trends Appendix - Display 57
Autocorrelation Statistics for Surface Color at FDEP Station 25020111

Unadjusted for Seasonal Medians

Lagged COLOR	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.517	0.096	0.192	-0.192
2	0.238	0.104	0.209	-0.209
3	0.028	0.106	0.212	-0.212
4	-0.131	0.106	0.212	-0.212
5	-0.206	0.107	0.213	-0.213
6	-0.194	0.108	0.216	-0.216
7	-0.295	0.109	0.218	-0.218
8	-0.205	0.111	0.223	-0.223
9	-0.060	0.113	0.225	-0.225
10	0.142	0.113	0.225	-0.225
11	0.322	0.113	0.226	-0.226
12	0.498	0.116	0.232	-0.232
13	0.291	0.122	0.245	-0.245
14	0.107	0.125	0.249	-0.249
15	-0.139	0.125	0.250	-0.250

Horse Creek Trends Appendix - Display 58
Correlogram for Surface Color at FDEP Station 25020111



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Horse Creek Trends Appendix - Display 59

Seasonal Kendall Tau Trend Test Statistics for Surface Color at FDEP Station 25020111

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.074	0.196	0.25	0.357

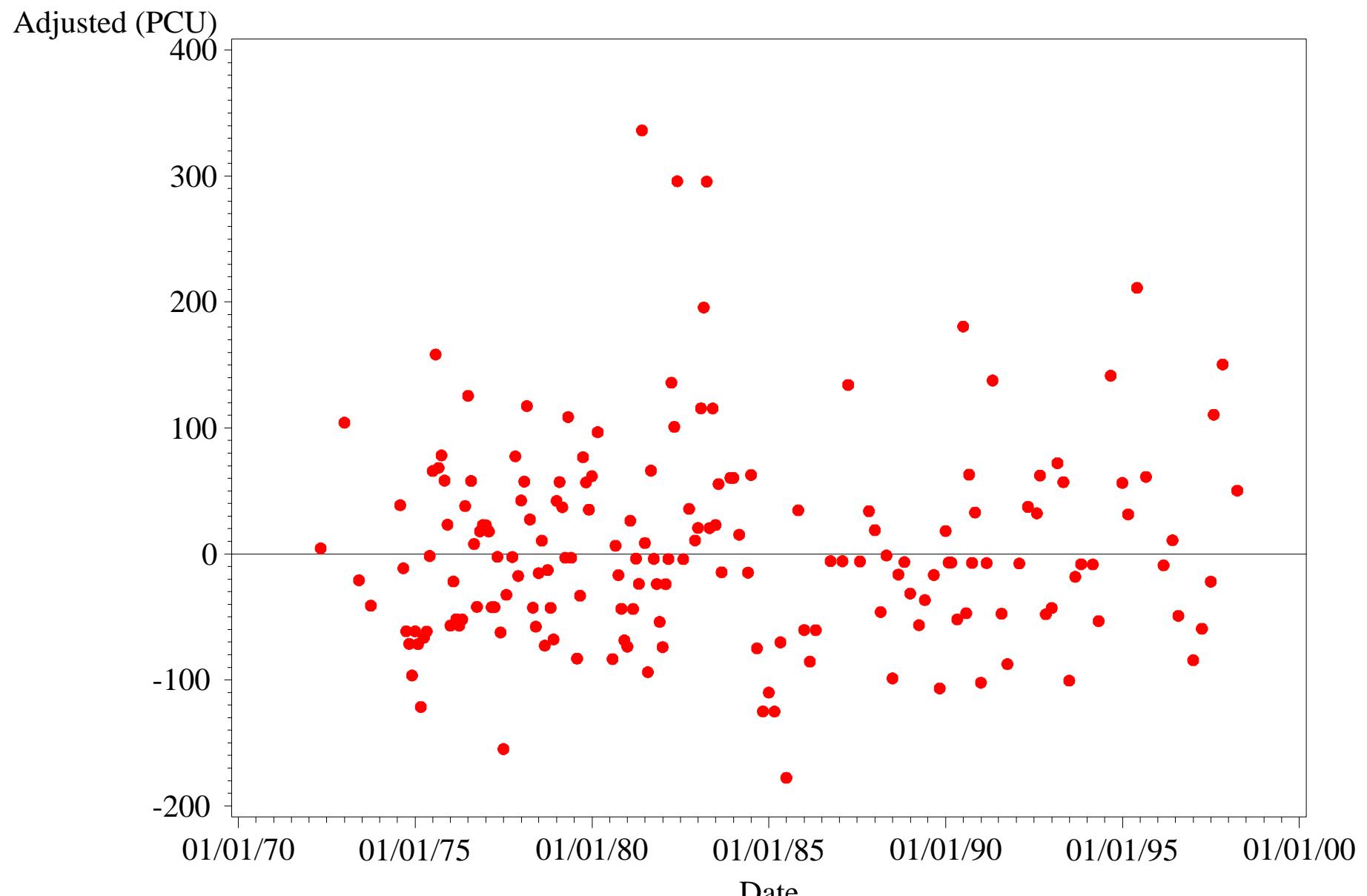
Horse Creek Trends Appendix - Display 60

Seasonal Kendall Tau Trend Test Statistics for Surface Color at FDEP Station 25020111

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.073751	0.19623	0.25001	0.35714

Horse Creek Trends Appendix - Display 61
Time Series Plot of Surface Color Data Adjusted for Season and Detrended
at FDEP Station 25020111

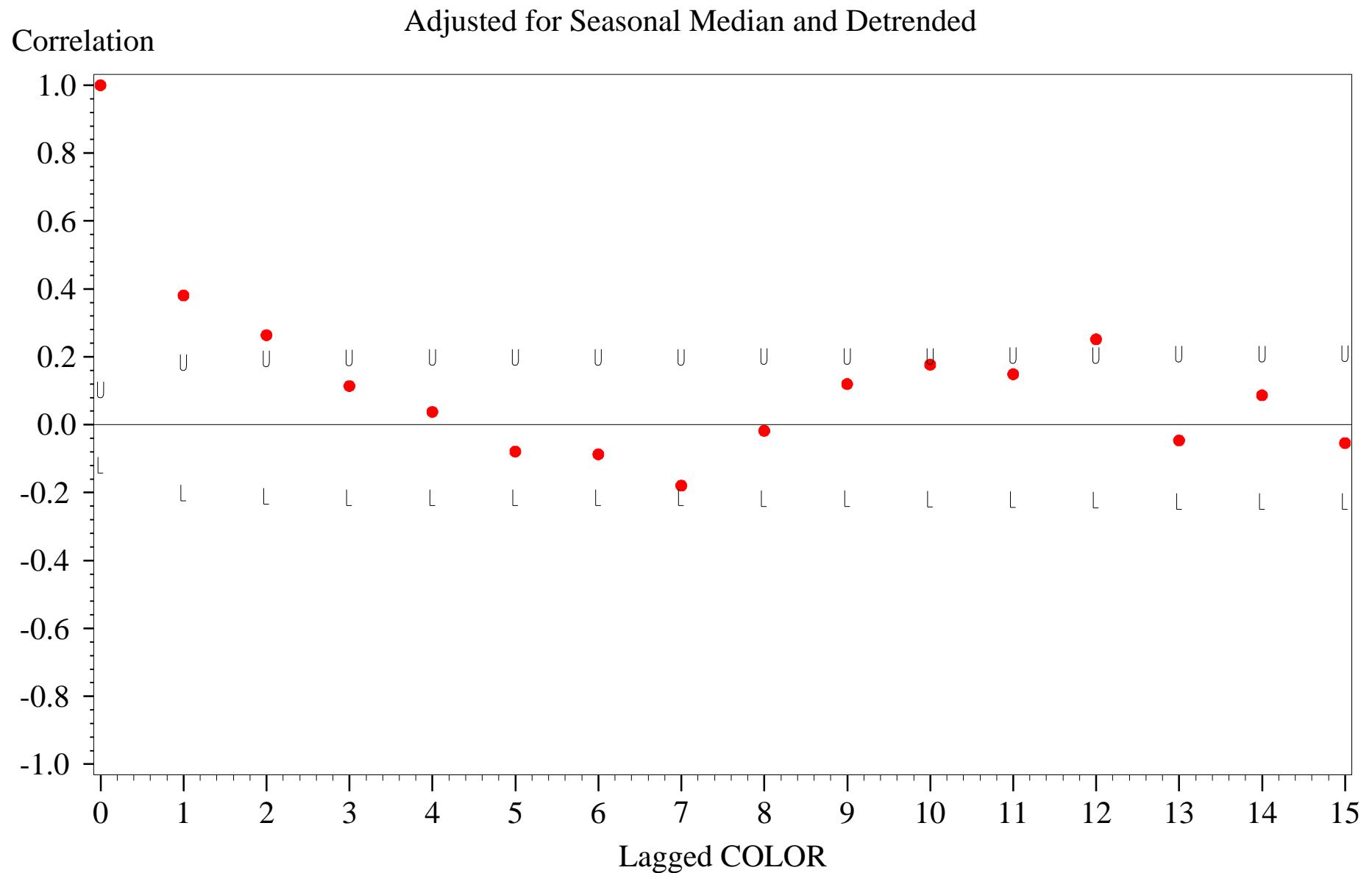


Zero Reference Line Shown

Horse Creek Trends Appendix - Display 62
Autocorrelation Statistics for Surface Color at FDEP Station 25020111
Adjusted for Seasonal Median and Detrended

Lagged COLOR	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.381	0.096	0.192	-0.192
2	0.264	0.101	0.202	-0.202
3	0.114	0.103	0.206	-0.206
4	0.038	0.103	0.207	-0.207
5	-0.079	0.103	0.207	-0.207
6	-0.087	0.104	0.207	-0.207
7	-0.179	0.104	0.207	-0.207
8	-0.018	0.105	0.209	-0.209
9	0.120	0.105	0.209	-0.209
10	0.177	0.105	0.210	-0.210
11	0.149	0.106	0.212	-0.212
12	0.252	0.107	0.213	-0.213
13	-0.046	0.109	0.217	-0.217
14	0.087	0.109	0.217	-0.217
15	-0.054	0.109	0.218	-0.218

Horse Creek Trends Appendix - Display 63
Correlogram for Surface Color at FDEP Station 25020111



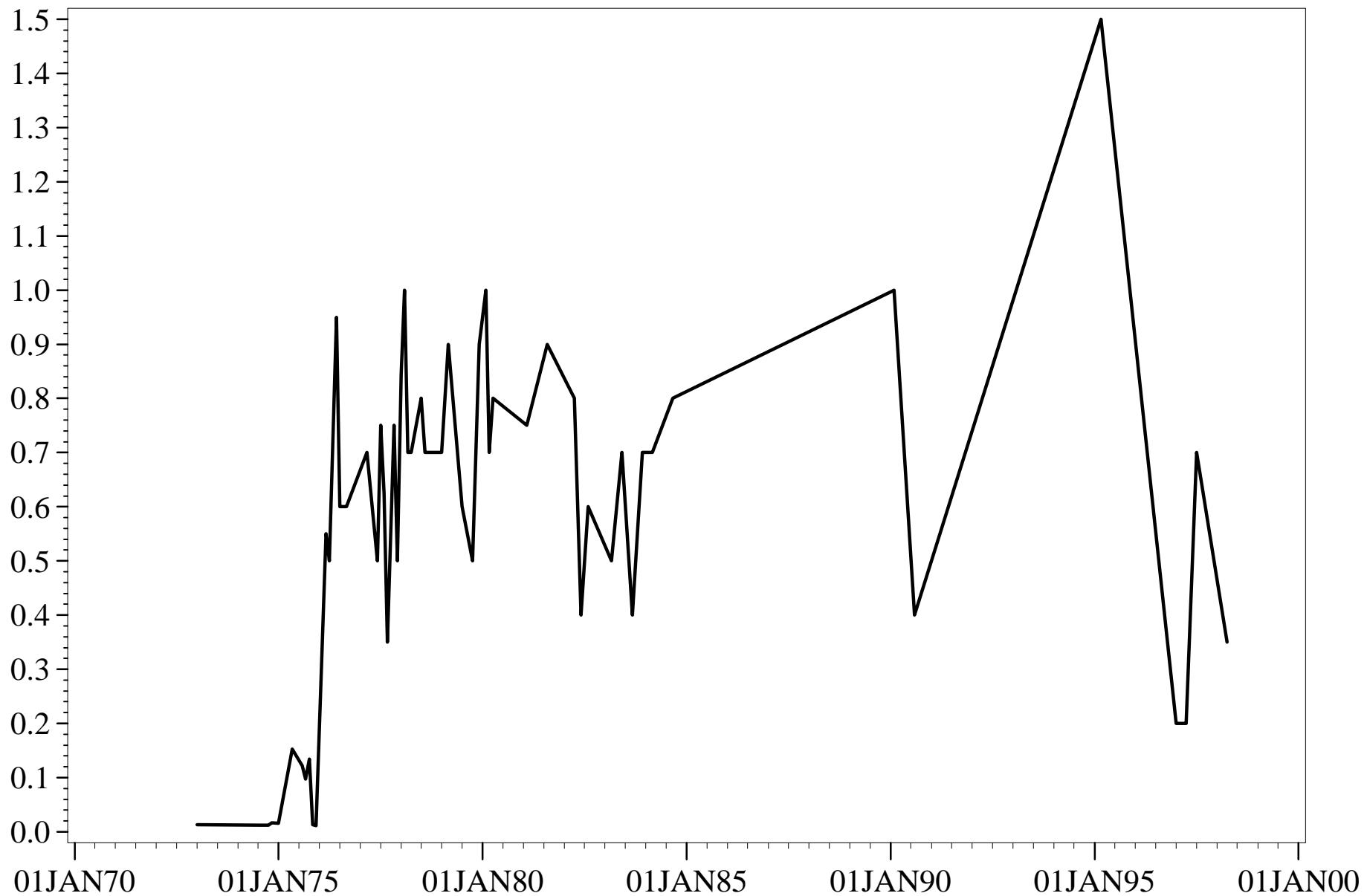
U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Secchi Disk Depth
(m)

Horse Creek Trends Appendix - Display 64

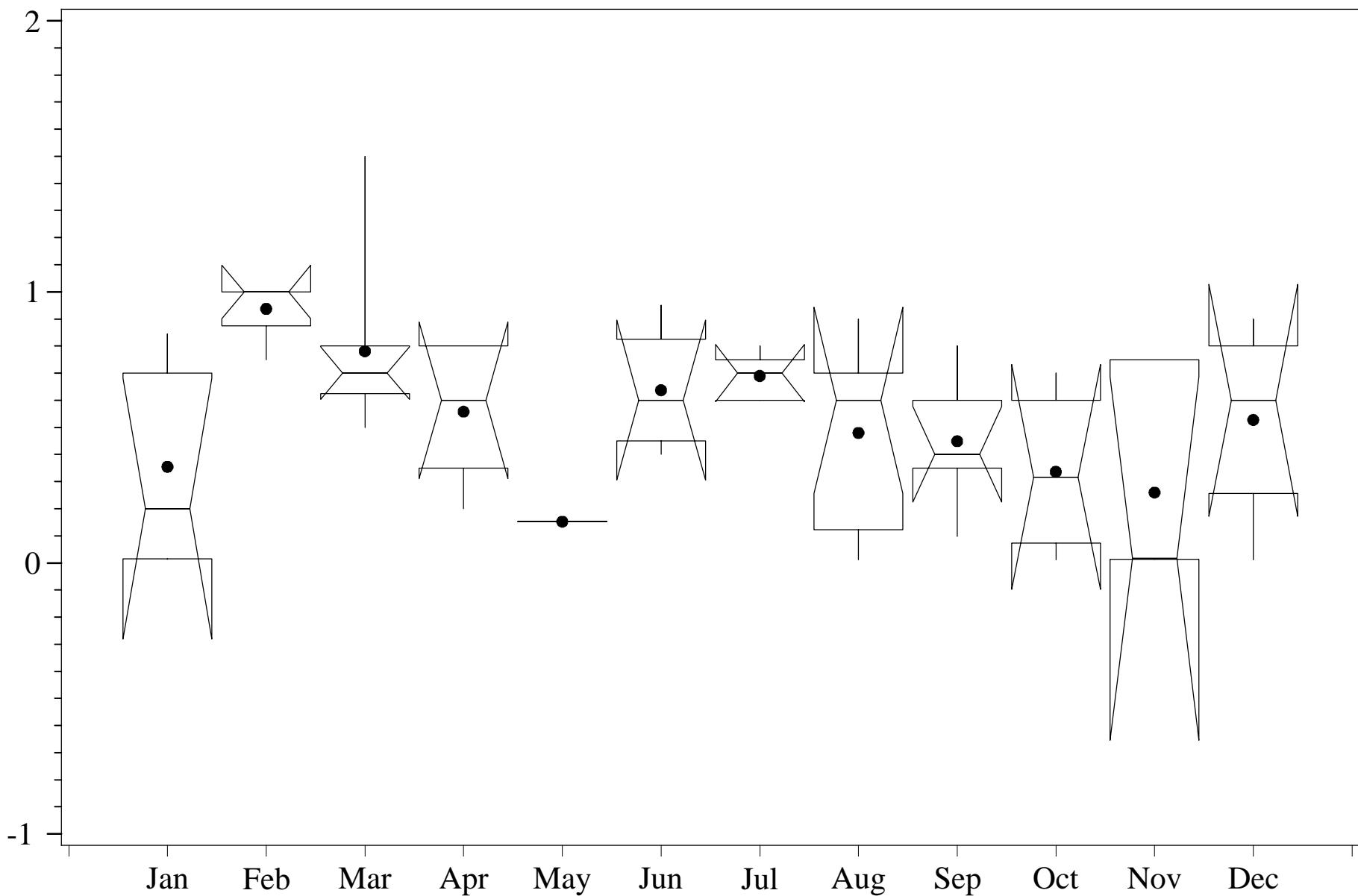
Monthly Data Time Series

for Column Secchi Disk Depth at FDEP Station 25020111
Unadjusted for Seasonal Medians



Horse Creek Trends Appendix - Display 65
Seasonal Univariate Statistics
for Column Secchi Disk Depth at FDEP Station 25020111

Secchi Disk Depth
(m)



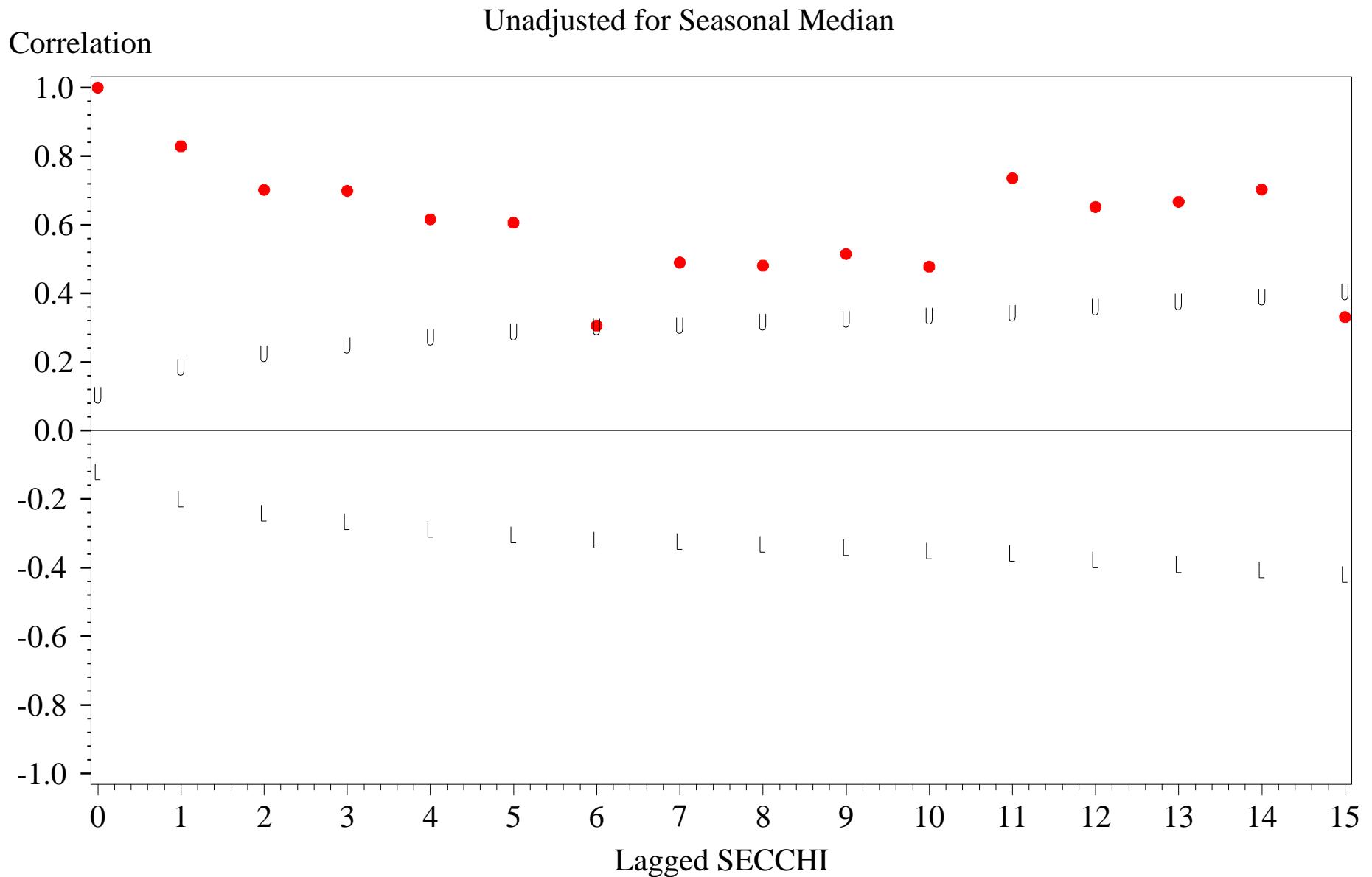
Horse Creek Trends Appendix - Display 66

Autocorrelation Statistics for Column Secchi Disk Depth at FDEP Station 25020111

Unadjusted for Seasonal Medians

Lagged SECCHI	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.829	0.096	0.192	-0.192
2	0.702	0.116	0.232	-0.232
3	0.699	0.129	0.257	-0.257
4	0.616	0.140	0.280	-0.280
5	0.606	0.148	0.296	-0.296
6	0.306	0.155	0.311	-0.311
7	0.490	0.157	0.315	-0.315
8	0.481	0.162	0.324	-0.324
9	0.515	0.166	0.333	-0.333
10	0.478	0.171	0.342	-0.342
11	0.736	0.175	0.350	-0.350
12	0.652	0.184	0.369	-0.369
13	0.667	0.191	0.383	-0.383
14	0.703	0.199	0.397	-0.397
15	0.331	0.206	0.412	-0.412

Horse Creek Trends Appendix - Display 67
Correlogram for Column Secchi Disk Depth at FDEP Station 25020111



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Horse Creek Trends Appendix - Display 68

Seasonal Kendall Tau Trend Test Statistics
for Column Secchi Disk Depth at FDEP Station 25020111

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.248	0.046	0.119	0.025

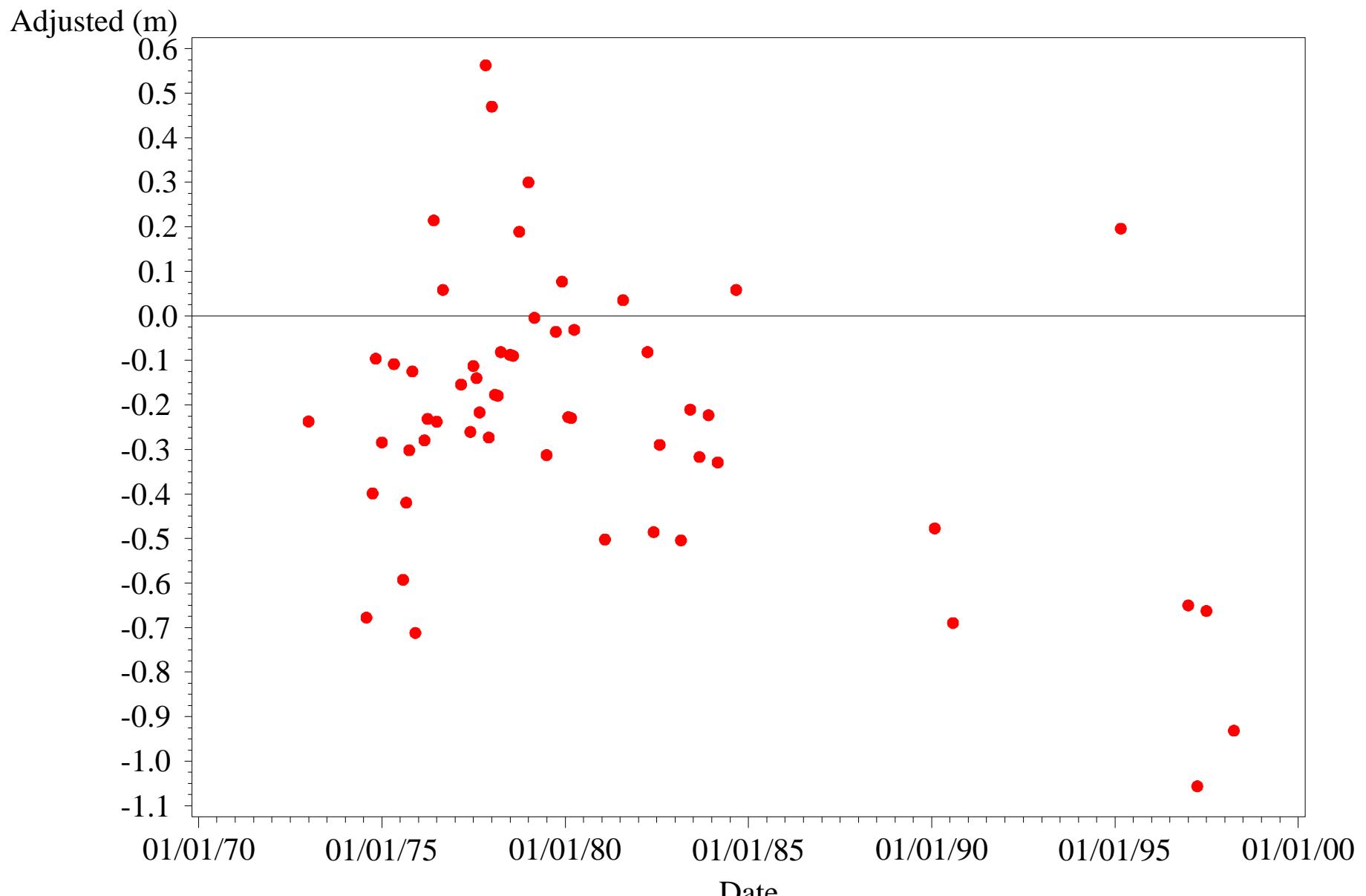
Horse Creek Trends Appendix - Display 69

Seasonal Kendall Tau Trend Test Statistics
for Column Secchi Disk Depth at FDEP Station 25020111

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.24793	0.046401	0.11863	0.025

Horse Creek Trends Appendix - Display 70
Time Series Plot of Column Secchi Disk Depth Data Adjusted for Season and Detrended
at FDEP Station 25020111



Zero Reference Line Shown

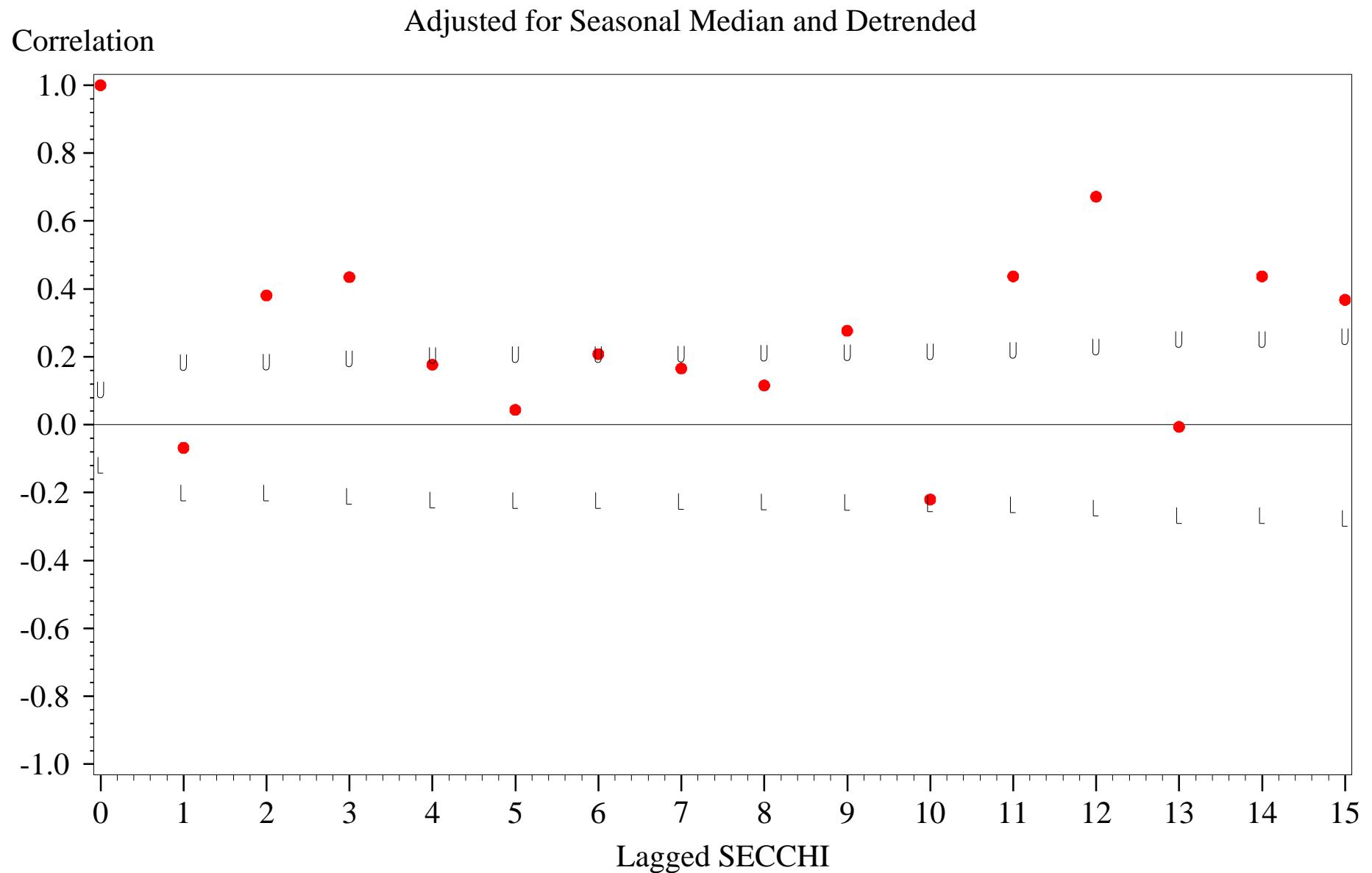
Horse Creek Trends Appendix - Display 71

Autocorrelation Statistics for Column Secchi Disk Depth at FDEP Station 25020111

Adjusted for Seasonal Median and Detrended

Lagged SECCHI	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	-0.068	0.096	0.192	-0.192
2	0.381	0.096	0.193	-0.193
3	0.435	0.101	0.202	-0.202
4	0.177	0.107	0.213	-0.213
5	0.044	0.107	0.215	-0.215
6	0.208	0.108	0.215	-0.215
7	0.166	0.109	0.217	-0.217
8	0.116	0.110	0.219	-0.219
9	0.277	0.110	0.220	-0.220
10	-0.220	0.112	0.224	-0.224
11	0.437	0.113	0.227	-0.227
12	0.672	0.118	0.237	-0.237
13	-0.006	0.130	0.259	-0.259
14	0.437	0.130	0.259	-0.259
15	0.368	0.134	0.268	-0.268

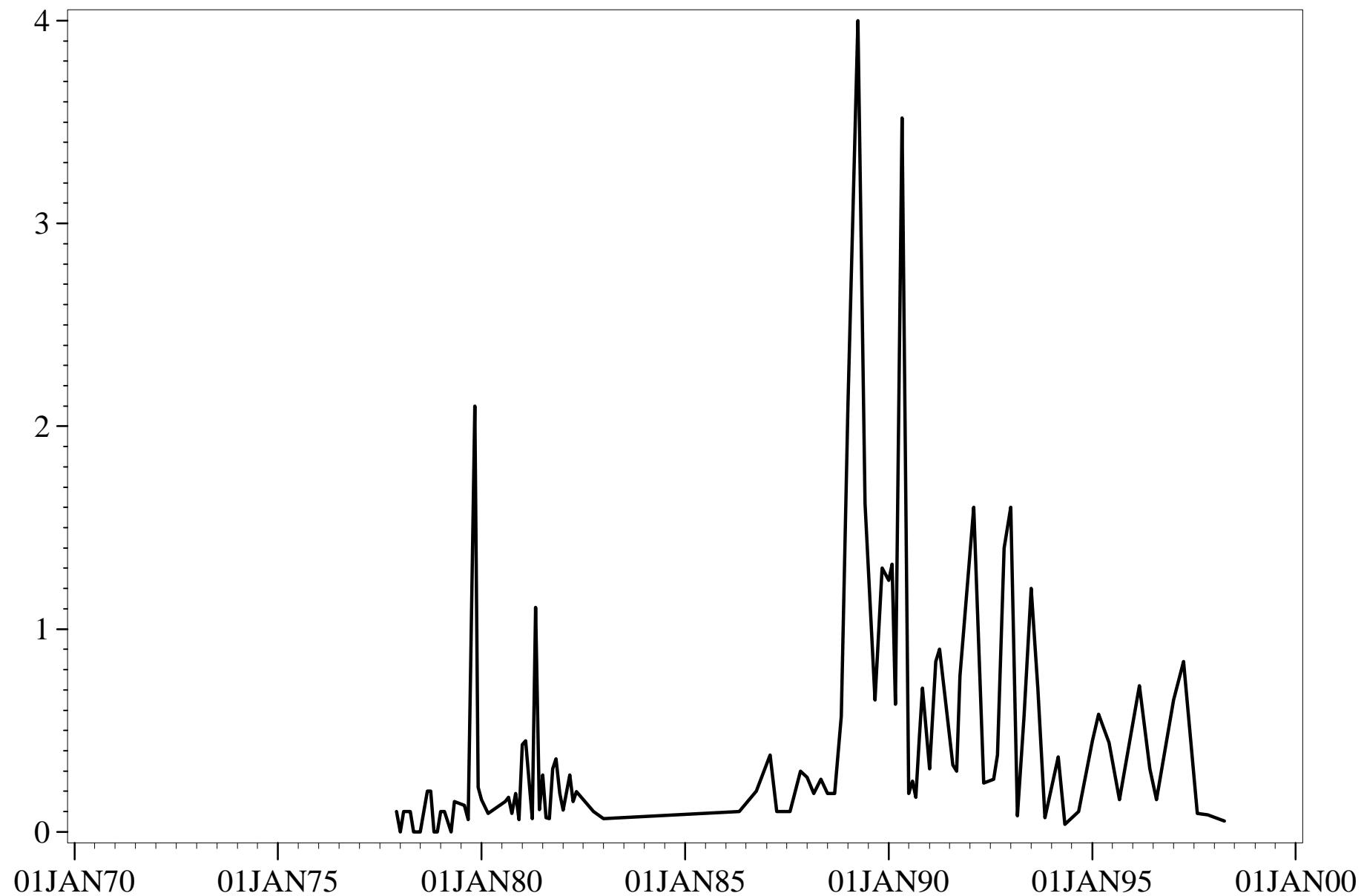
Horse Creek Trends Appendix - Display 72
Correlogram for Column Secchi Disk Depth at FDEP Station 25020111



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

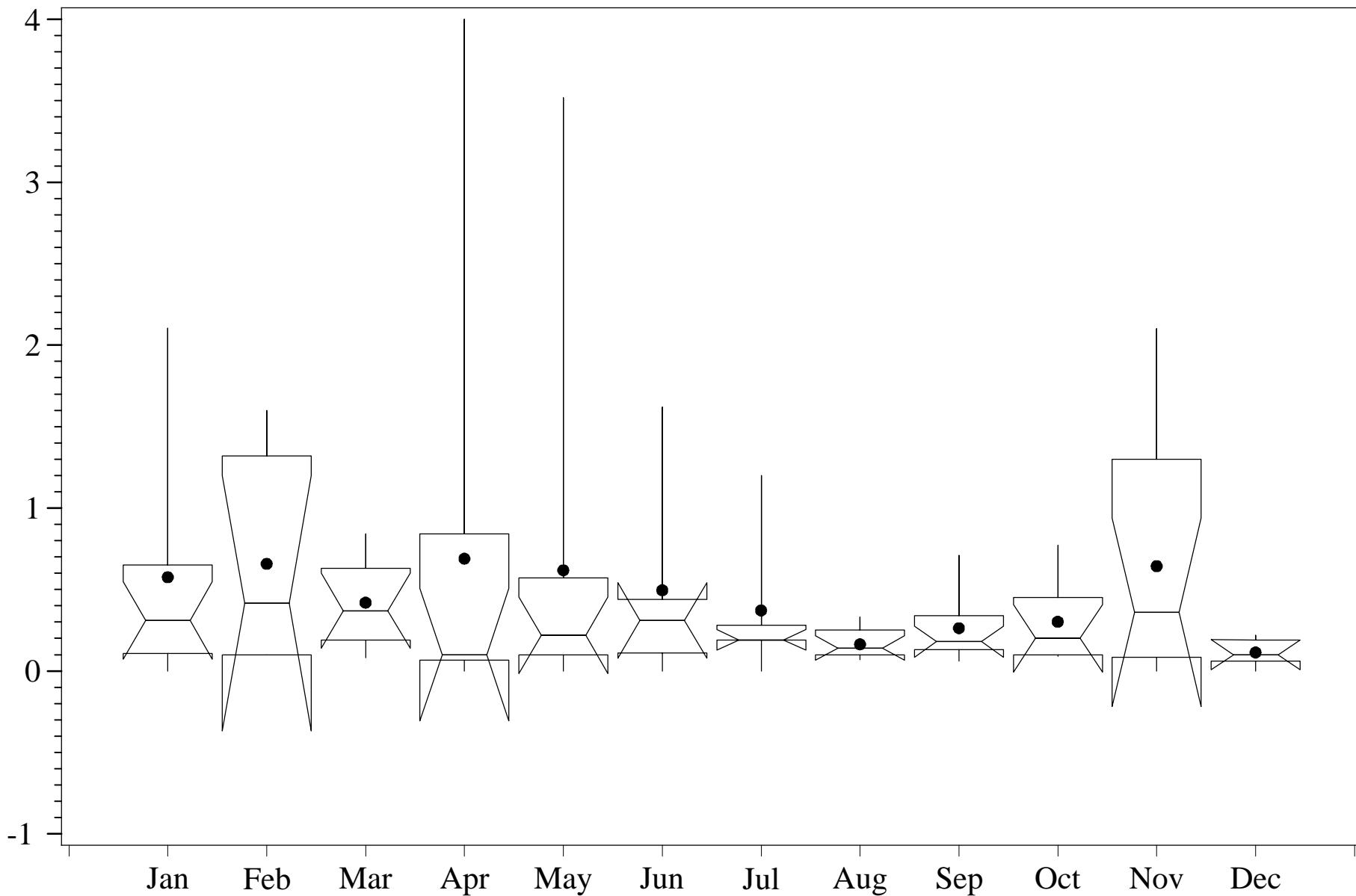
Nitrate+Nitrite N
(mg/L)

Horse Creek Trends Appendix - Display 73
Monthly Data Time Series
for Surface Nitrate+Nitrite N at FDEP Station 25020111
Unadjusted for Seasonal Medians



Nitrate+Nitrite N
(mg/L)

Horse Creek Trends Appendix - Display 74
Seasonal Univariate Statistics
for Surface Nitrate+Nitrite N at FDEP Station 25020111



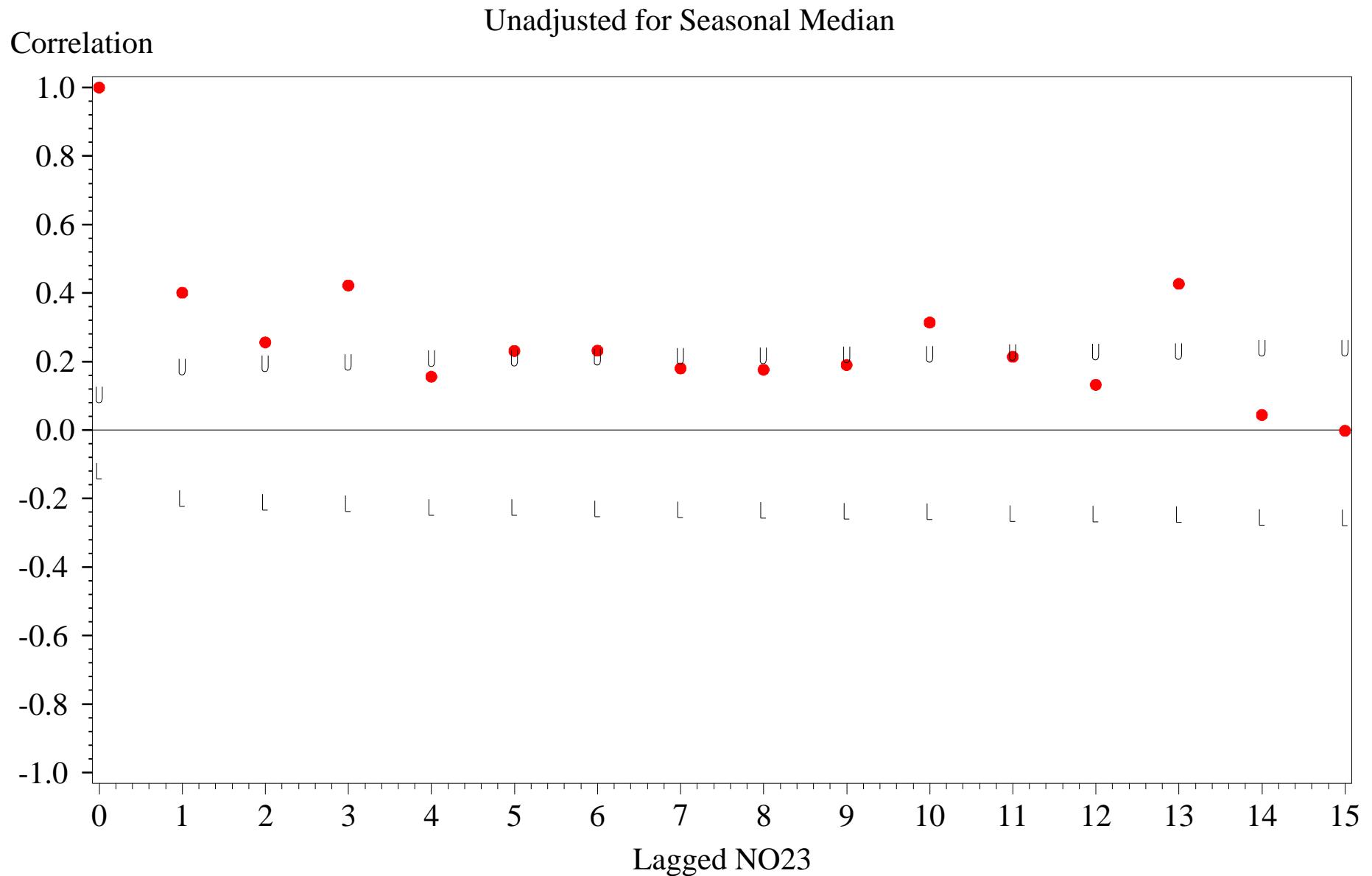
Horse Creek Trends Appendix - Display 75

Autocorrelation Statistics for Surface Nitrate+Nitrite N at FDEP Station 25020111

Unadjusted for Seasonal Medians

Lagged NO23	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.401	0.096	0.192	-0.192
2	0.256	0.101	0.202	-0.202
3	0.422	0.103	0.206	-0.206
4	0.156	0.108	0.217	-0.217
5	0.231	0.109	0.218	-0.218
6	0.232	0.111	0.221	-0.221
7	0.180	0.112	0.224	-0.224
8	0.176	0.113	0.226	-0.226
9	0.190	0.114	0.228	-0.228
10	0.314	0.115	0.230	-0.230
11	0.214	0.117	0.235	-0.235
12	0.132	0.119	0.237	-0.237
13	0.427	0.119	0.238	-0.238
14	0.044	0.124	0.247	-0.247
15	-0.002	0.124	0.248	-0.248

Horse Creek Trends Appendix - Display 76
Correlogram for Surface Nitrate+Nitrite N at FDEP Station 25020111



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Horse Creek Trends Appendix - Display 77

Seasonal Kendall Tau Trend Test Statistics
for Surface Nitrate+Nitrite N at FDEP Station 25020111

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.321	0	0.017	0.018

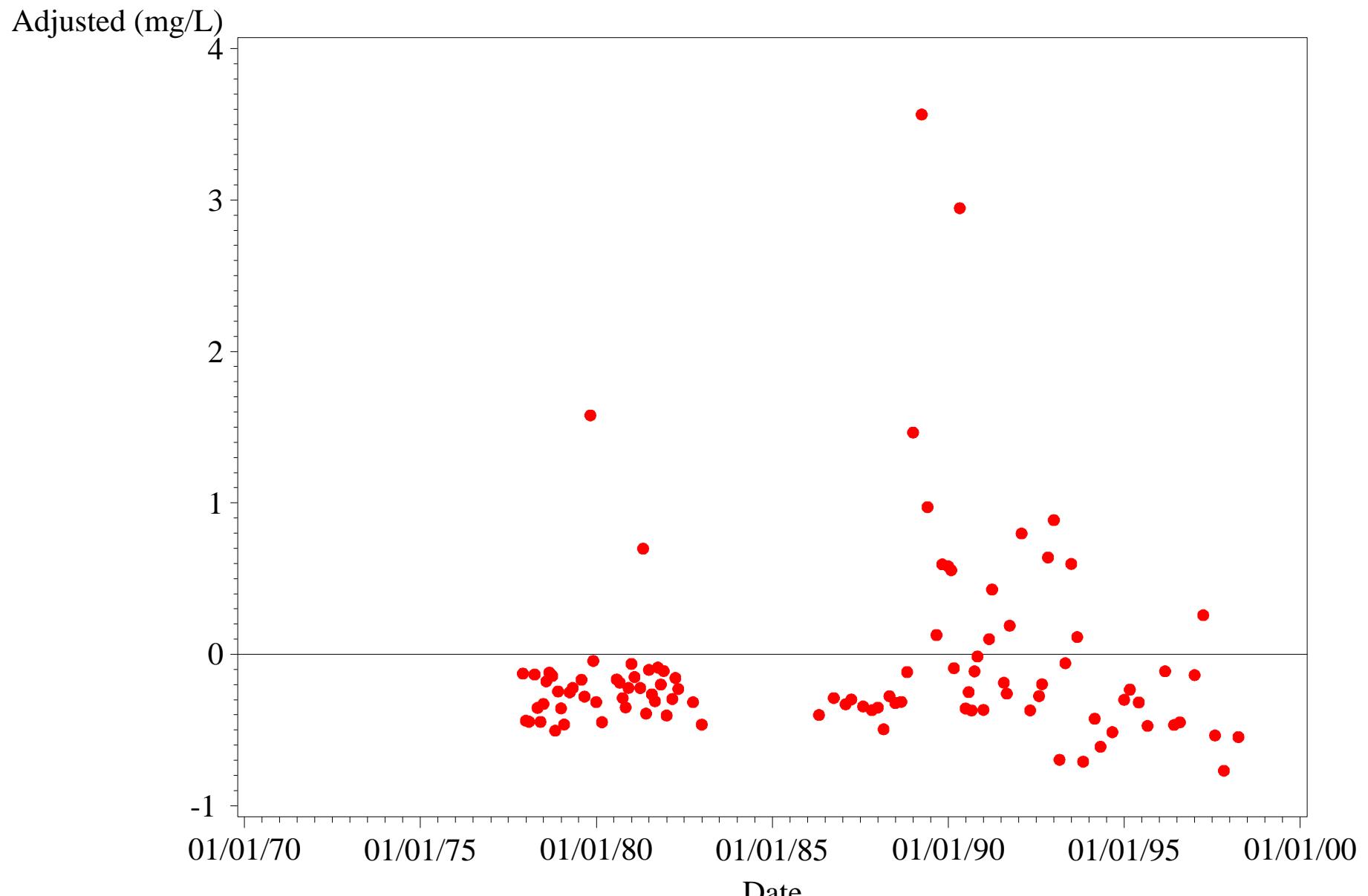
Horse Creek Trends Appendix - Display 78

Seasonal Kendall Tau Trend Test Statistics
for Surface Nitrate+Nitrite N at FDEP Station 25020111

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.32084	.000084877	0.016989	0.018333

Horse Creek Trends Appendix - Display 79
Time Series Plot of Surface Nitrate+Nitrite N Data Adjusted for Season and Detrended
at FDEP Station 25020111



Zero Reference Line Shown

Horse Creek Trends Appendix - Display 80

Autocorrelation Statistics for Surface Nitrate+Nitrite N at FDEP Station 25020111

Adjusted for Seasonal Median and Detrended

Lagged NO23	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.256	0.096	0.192	-0.192
2	0.167	0.098	0.197	-0.197
3	0.363	0.099	0.198	-0.198
4	0.038	0.103	0.206	-0.206
5	0.150	0.103	0.206	-0.206
6	0.162	0.104	0.208	-0.208
7	0.109	0.105	0.209	-0.209
8	0.070	0.105	0.210	-0.210
9	0.104	0.105	0.210	-0.210
10	0.185	0.105	0.211	-0.211
11	0.140	0.106	0.213	-0.213
12	-0.038	0.107	0.214	-0.214
13	0.369	0.107	0.214	-0.214
14	-0.047	0.111	0.222	-0.222
15	-0.066	0.111	0.222	-0.222

Horse Creek Trends Appendix - Display 81

Correlogram for Surface Nitrate+Nitrite N at FDEP Station 25020111

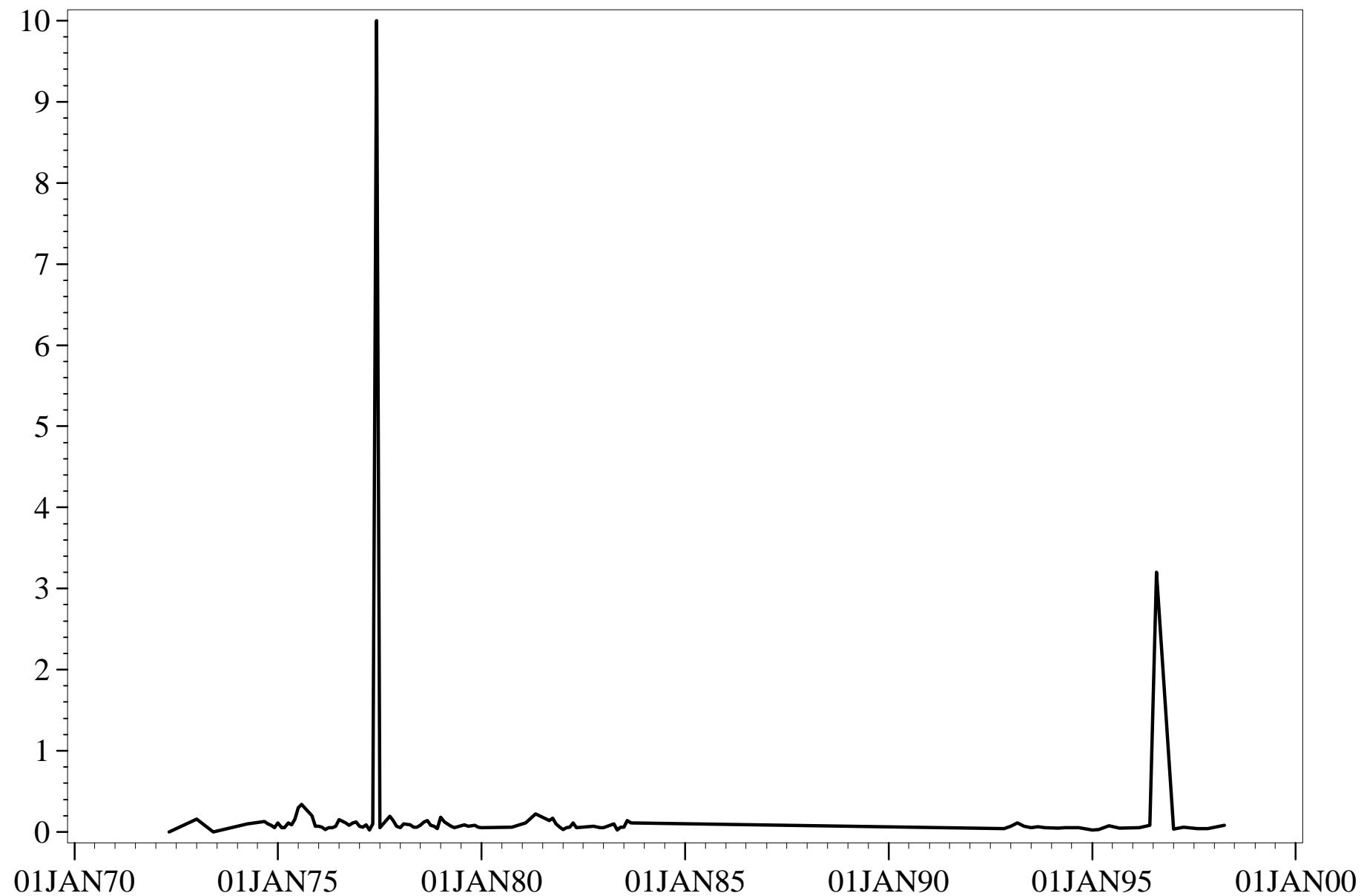
Adjusted for Seasonal Median and Detrended

Lagged NO23	Correlation
0	1.00
1	0.25
2	0.18
3	0.37
4	0.04
5	0.16
6	0.16
7	0.12
8	0.07
9	0.11
10	0.18
11	0.14
12	-0.06
13	0.38
14	-0.08
15	-0.08

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

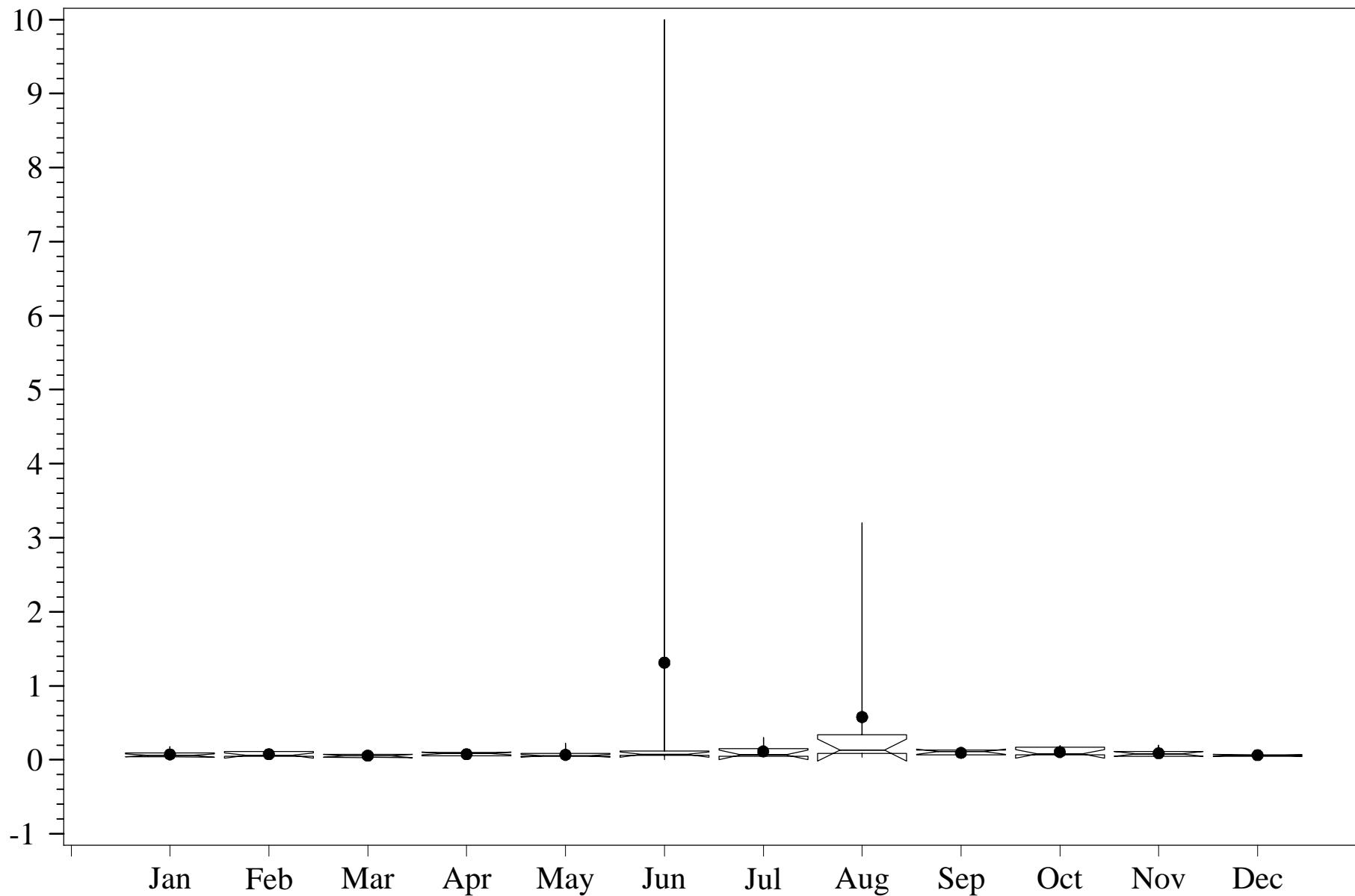
Ammonia N
(mg/L)

Horse Creek Trends Appendix - Display 82
Monthly Data Time Series
for Surface Ammonia N at FDEP Station 25020111
Unadjusted for Seasonal Medians



Ammonia N
(mg/L)

Horse Creek Trends Appendix - Display 83
Seasonal Univariate Statistics
for Surface Ammonia N at FDEP Station 25020111



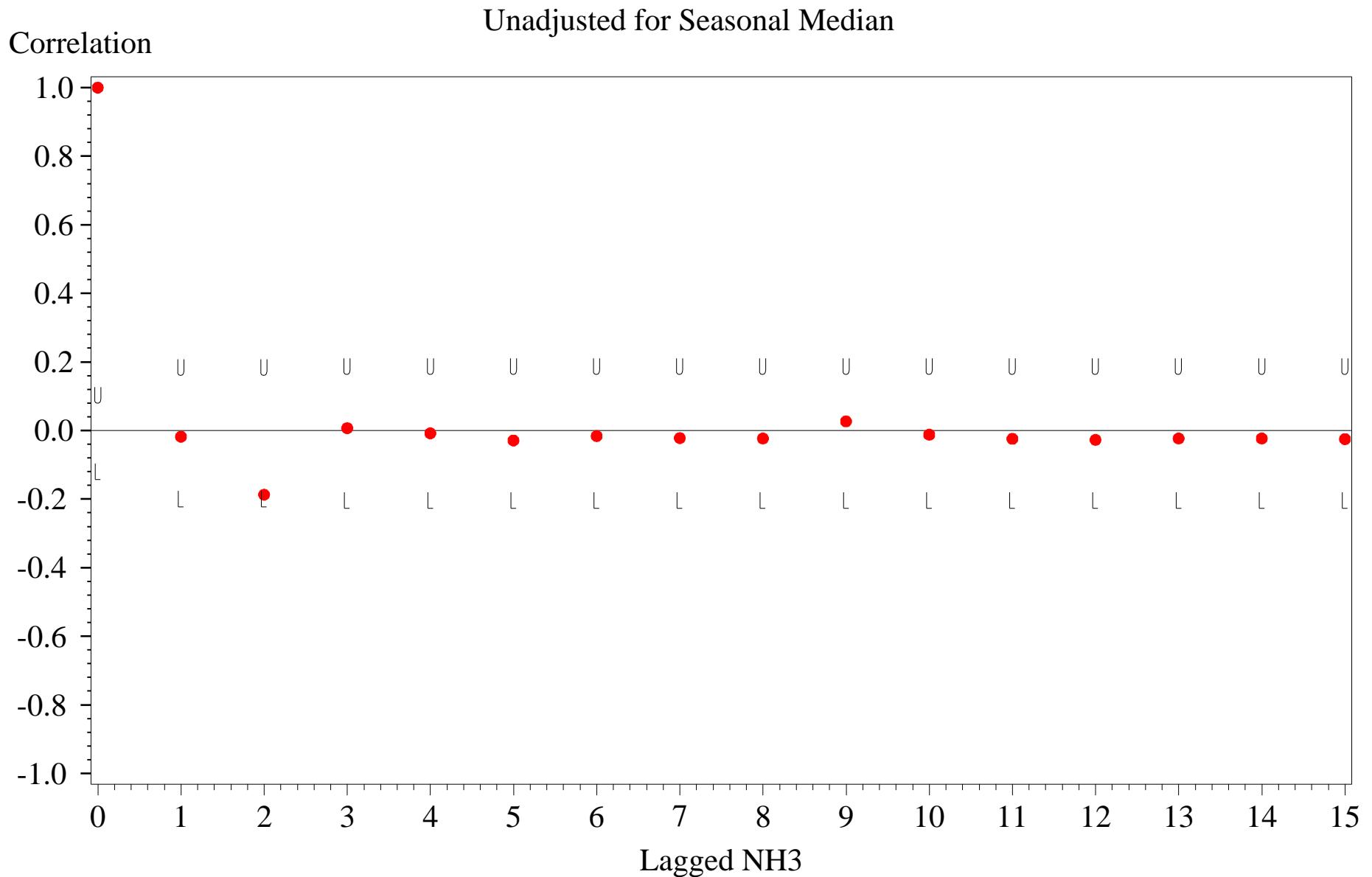
Horse Creek Trends Appendix - Display 84

Autocorrelation Statistics for Surface Ammonia N at FDEP Station 25020111

Unadjusted for Seasonal Medians

Lagged NH3	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	-0.018	0.096	0.192	-0.192
2	-0.187	0.096	0.192	-0.192
3	0.007	0.097	0.195	-0.195
4	-0.008	0.097	0.195	-0.195
5	-0.029	0.097	0.195	-0.195
6	-0.016	0.097	0.195	-0.195
7	-0.022	0.097	0.195	-0.195
8	-0.023	0.097	0.195	-0.195
9	0.027	0.097	0.195	-0.195
10	-0.012	0.097	0.195	-0.195
11	-0.024	0.097	0.195	-0.195
12	-0.027	0.097	0.195	-0.195
13	-0.023	0.097	0.195	-0.195
14	-0.023	0.098	0.195	-0.195
15	-0.025	0.098	0.195	-0.195

Horse Creek Trends Appendix - Display 85
Correlogram for Surface Ammonia N at FDEP Station 25020111



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Horse Creek Trends Appendix - Display 86

Seasonal Kendall Tau Trend Test Statistics
for Surface Ammonia N at FDEP Station 25020111

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.237	.003	0.029	-.002

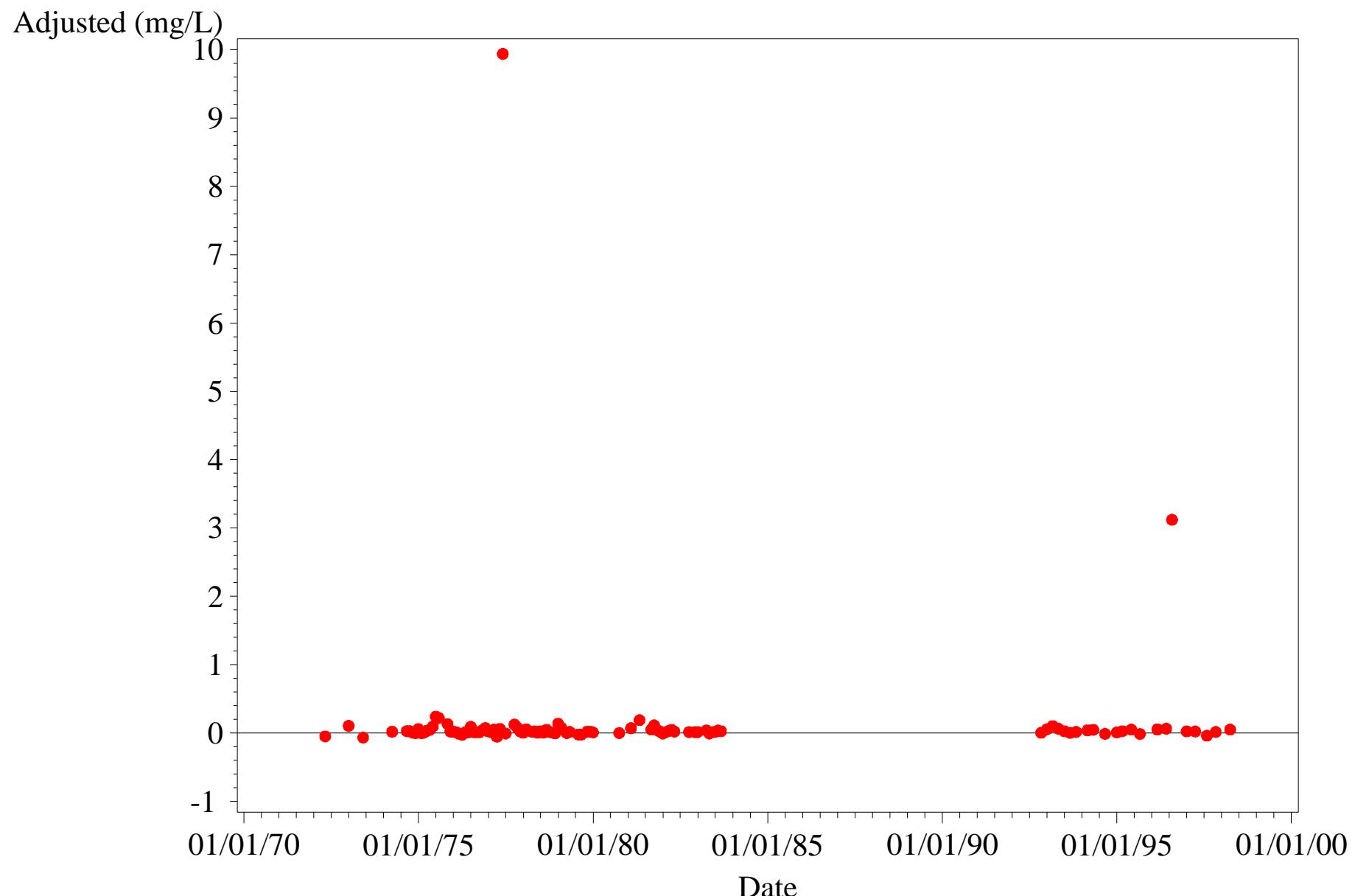
Horse Creek Trends Appendix - Display 87

Seasonal Kendall Tau Trend Test Statistics
for Surface Ammonia N at FDEP Station 25020111

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.23716	.00312991	0.028529	-.002

Horse Creek Trends Appendix - Display 88
Time Series Plot of Surface Ammonia N Data Adjusted for Season and Detrended
at FDEP Station 25020111



Zero Reference Line Shown

Horse Creek Trends Appendix - Display 89

Autocorrelation Statistics for Surface Ammonia N at FDEP Station 25020111

Adjusted for Seasonal Median and Detrended

Lagged NH3	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	-0.016	0.096	0.192	-0.192
2	-0.243	0.096	0.192	-0.192
3	0.062	0.098	0.196	-0.196
4	-0.009	0.098	0.196	-0.196
5	-0.026	0.098	0.196	-0.196
6	-0.014	0.098	0.196	-0.196
7	-0.022	0.098	0.197	-0.197
8	-0.022	0.098	0.197	-0.197
9	-0.070	0.098	0.197	-0.197
10	-0.021	0.098	0.197	-0.197
11	-0.023	0.098	0.197	-0.197
12	-0.029	0.098	0.197	-0.197
13	-0.022	0.098	0.197	-0.197
14	-0.030	0.099	0.197	-0.197
15	-0.026	0.099	0.197	-0.197

Horse Creek Trends Appendix - Display 90

Correlogram for Surface Ammonia N at FDEP Station 25020111

Adjusted for Seasonal Median and Detrended

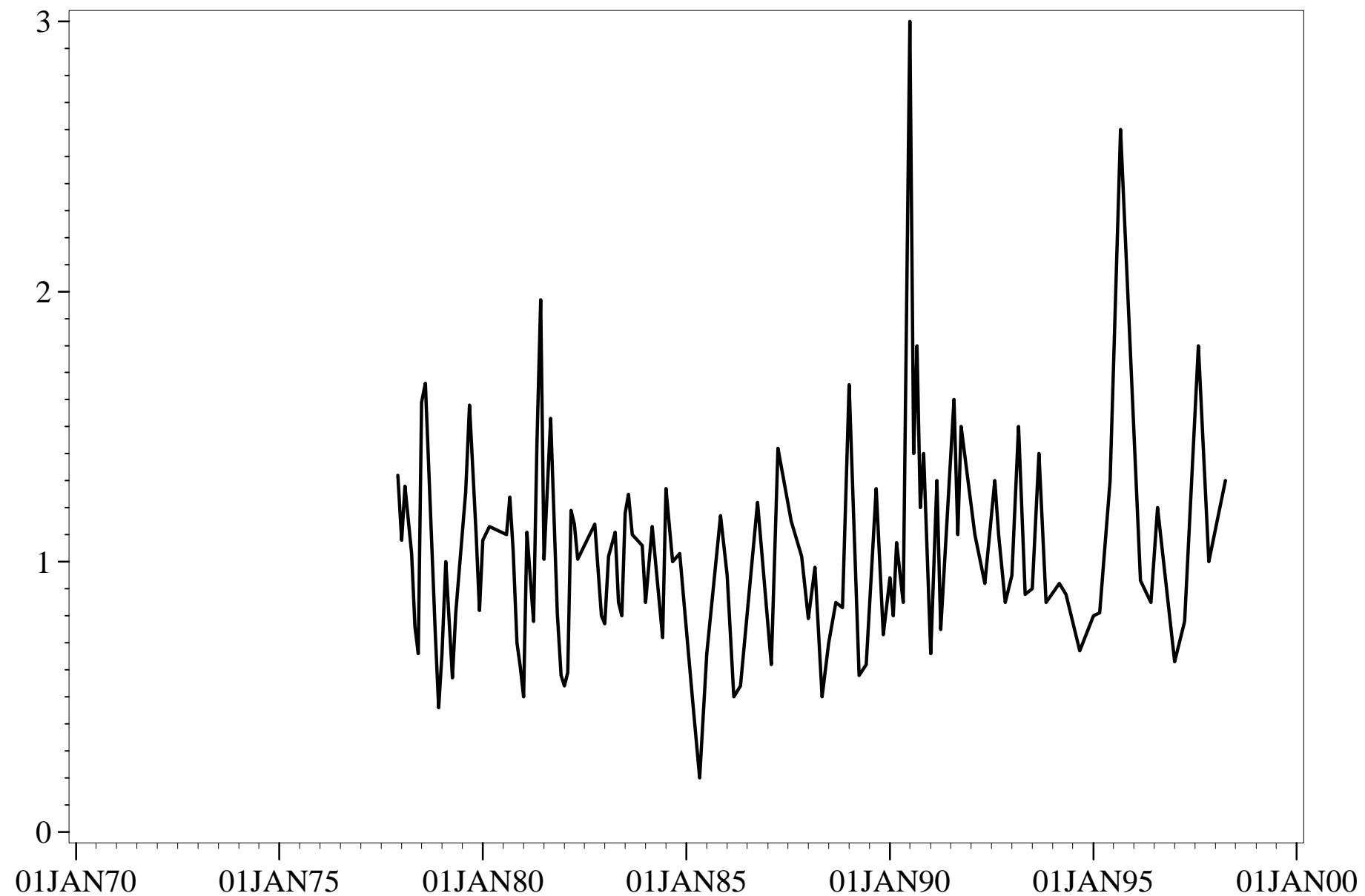
Correlation

The scatter plot displays the correlation coefficient between the current value and the value at each lag of the variable "Lagged NH3". The x-axis represents the lag number from 0 to 15. The y-axis represents the correlation coefficient from -1.0 to 1.0. The data points are red circles. The correlation is very high (near 1.0) at lag 0. It drops sharply to approximately -0.25 at lag 2, then fluctuates around zero for the remaining lags.

Lagged NH3	Correlation
0	1.00
1	-0.02
2	-0.25
3	0.06
4	-0.01
5	-0.01
6	-0.01
7	-0.01
8	-0.01
9	-0.12
10	-0.01
11	-0.01
12	-0.01
13	-0.01
14	-0.01
15	-0.01

U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

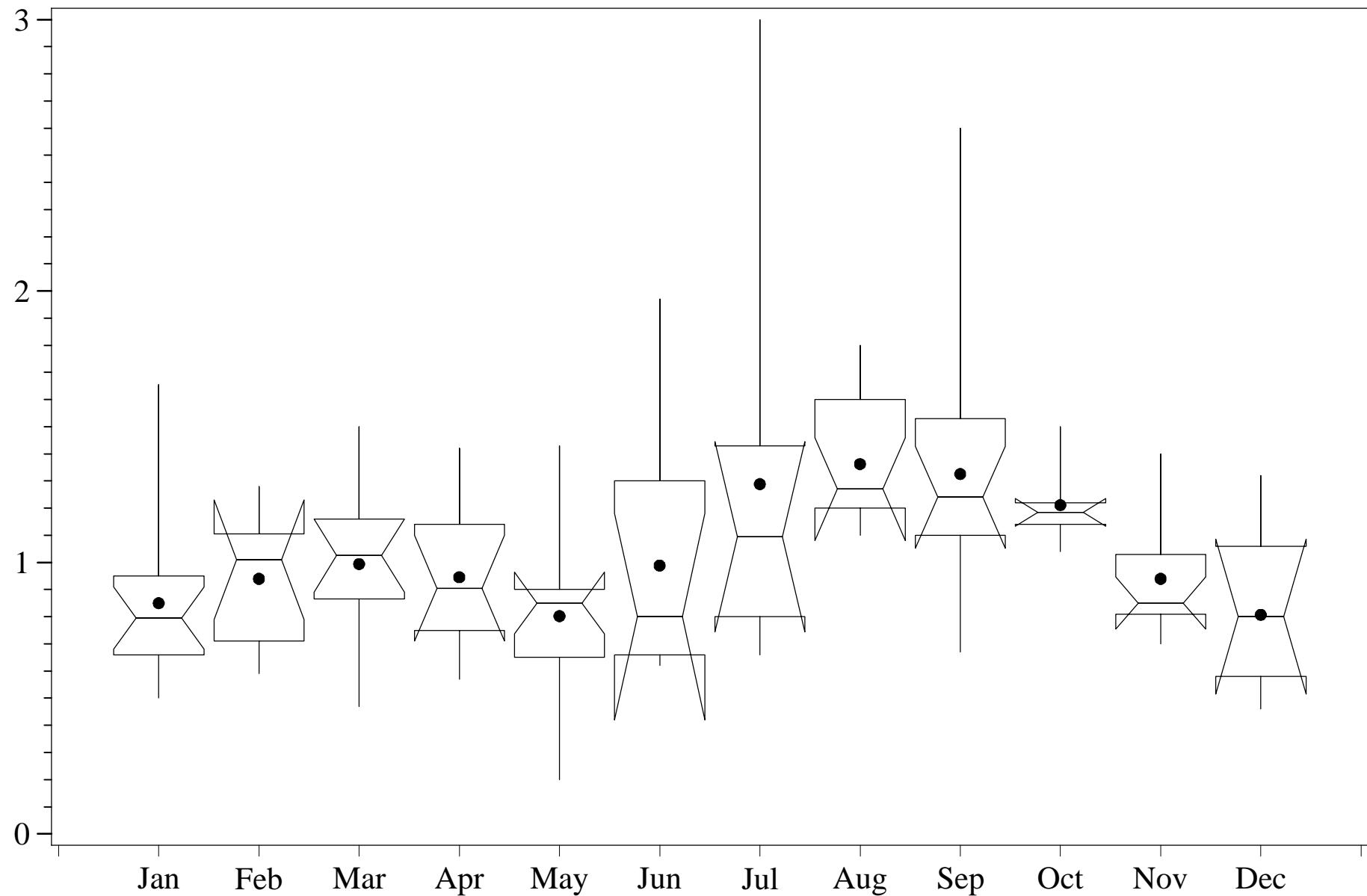
Horse Creek Trends Appendix - Display 91
Monthly Data Time Series
Total Kjeldahl Nitrogen for Surface Total Kjeldahl Nitrogen at FDEP Station 25020111
(mg/L) Unadjusted for Seasonal Medians



Horse Creek Trends Appendix - Display 92

Seasonal Univariate Statistics

Total Kjeldahl Nitrogen for Surface Total Kjeldahl Nitrogen at FDEP Station 25020111
(mg/L)



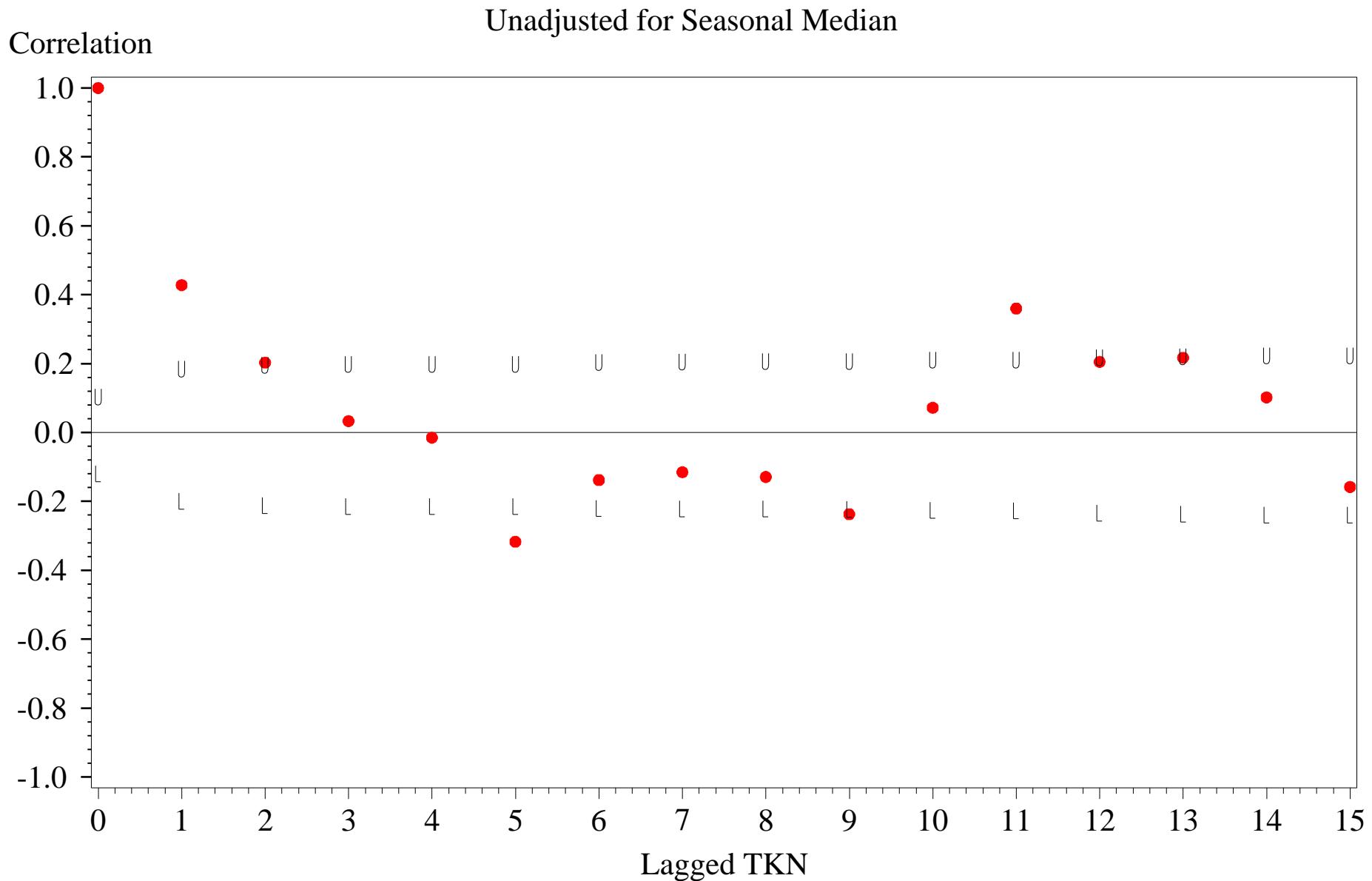
Horse Creek Trends Appendix - Display 93

Autocorrelation Statistics for Surface Total Kjeldahl Nitrogen at FDEP Station 25020111

Unadjusted for Seasonal Medians

Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.428	0.096	0.192	-0.192
2	0.203	0.102	0.204	-0.204
3	0.033	0.103	0.206	-0.206
4	-0.015	0.103	0.206	-0.206
5	-0.317	0.103	0.206	-0.206
6	-0.138	0.106	0.212	-0.212
7	-0.115	0.107	0.213	-0.213
8	-0.129	0.107	0.214	-0.214
9	-0.237	0.108	0.215	-0.215
10	0.072	0.109	0.218	-0.218
11	0.360	0.109	0.219	-0.219
12	0.205	0.113	0.226	-0.226
13	0.217	0.114	0.228	-0.228
14	0.102	0.115	0.231	-0.231
15	-0.158	0.116	0.231	-0.231

Horse Creek Trends Appendix - Display 94
Correlogram for Surface Total Kjeldahl Nitrogen at FDEP Station 25020111



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Horse Creek Trends Appendix - Display 95

Seasonal Kendall Tau Trend Test Statistics
for Surface Total Kjeldahl Nitrogen at FDEP Station 25020111

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.05	0.5	0.451	.003

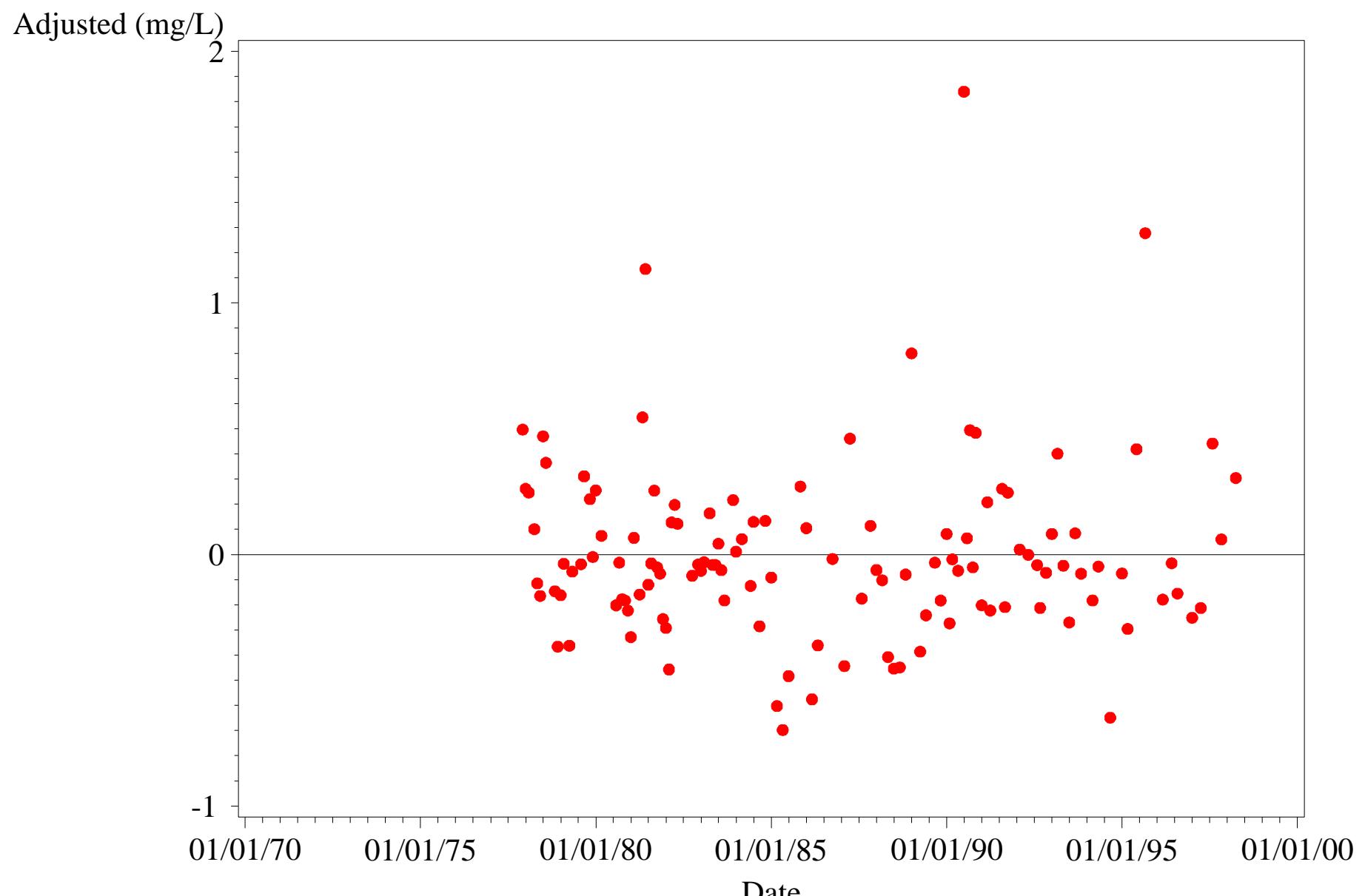
Horse Creek Trends Appendix - Display 96

Seasonal Kendall Tau Trend Test Statistics
for Surface Total Kjeldahl Nitrogen at FDEP Station 25020111

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.049920	0.50029	0.45074	.00333333

Horse Creek Trends Appendix - Display 97
Time Series Plot of Surface Total Kjeldahl Nitrogen Data Adjusted for Season and Detrended
at FDEP Station 25020111



Zero Reference Line Shown

Horse Creek Trends Appendix - Display 98

Autocorrelation Statistics for Surface Total Kjeldahl Nitrogen at FDEP Station 25020111

Adjusted for Seasonal Median and Detrended

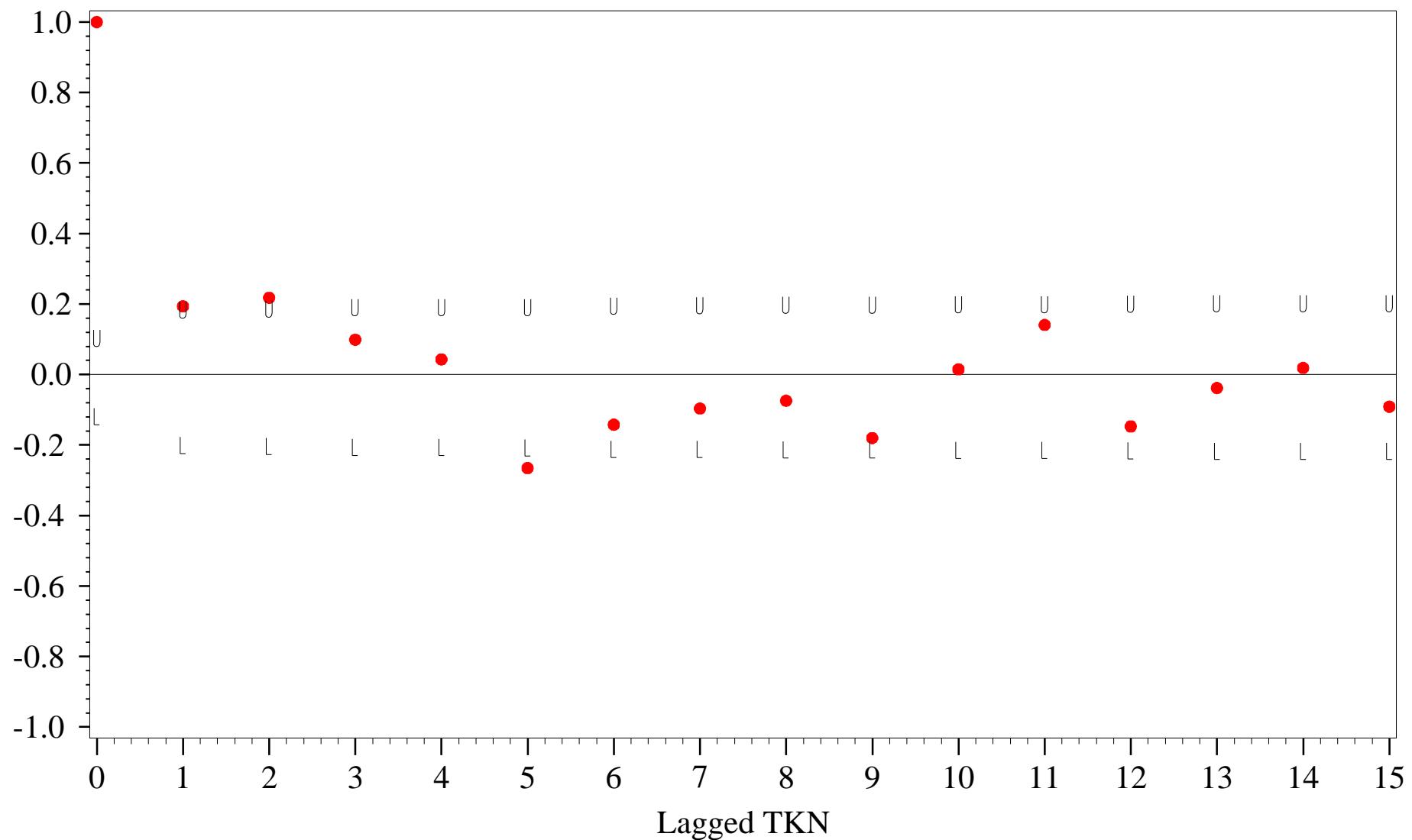
Lagged TKN	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.194	0.096	0.192	-0.192
2	0.218	0.097	0.195	-0.195
3	0.099	0.099	0.198	-0.198
4	0.043	0.099	0.198	-0.198
5	-0.265	0.099	0.199	-0.199
6	-0.142	0.101	0.203	-0.203
7	-0.096	0.102	0.204	-0.204
8	-0.074	0.102	0.205	-0.205
9	-0.180	0.102	0.205	-0.205
10	0.015	0.103	0.207	-0.207
11	0.141	0.103	0.207	-0.207
12	-0.147	0.104	0.208	-0.208
13	-0.038	0.105	0.209	-0.209
14	0.019	0.105	0.209	-0.209
15	-0.091	0.105	0.209	-0.209

Horse Creek Trends Appendix - Display 99

Correlogram for Surface Total Kjeldahl Nitrogen at FDEP Station 25020111

Correlation

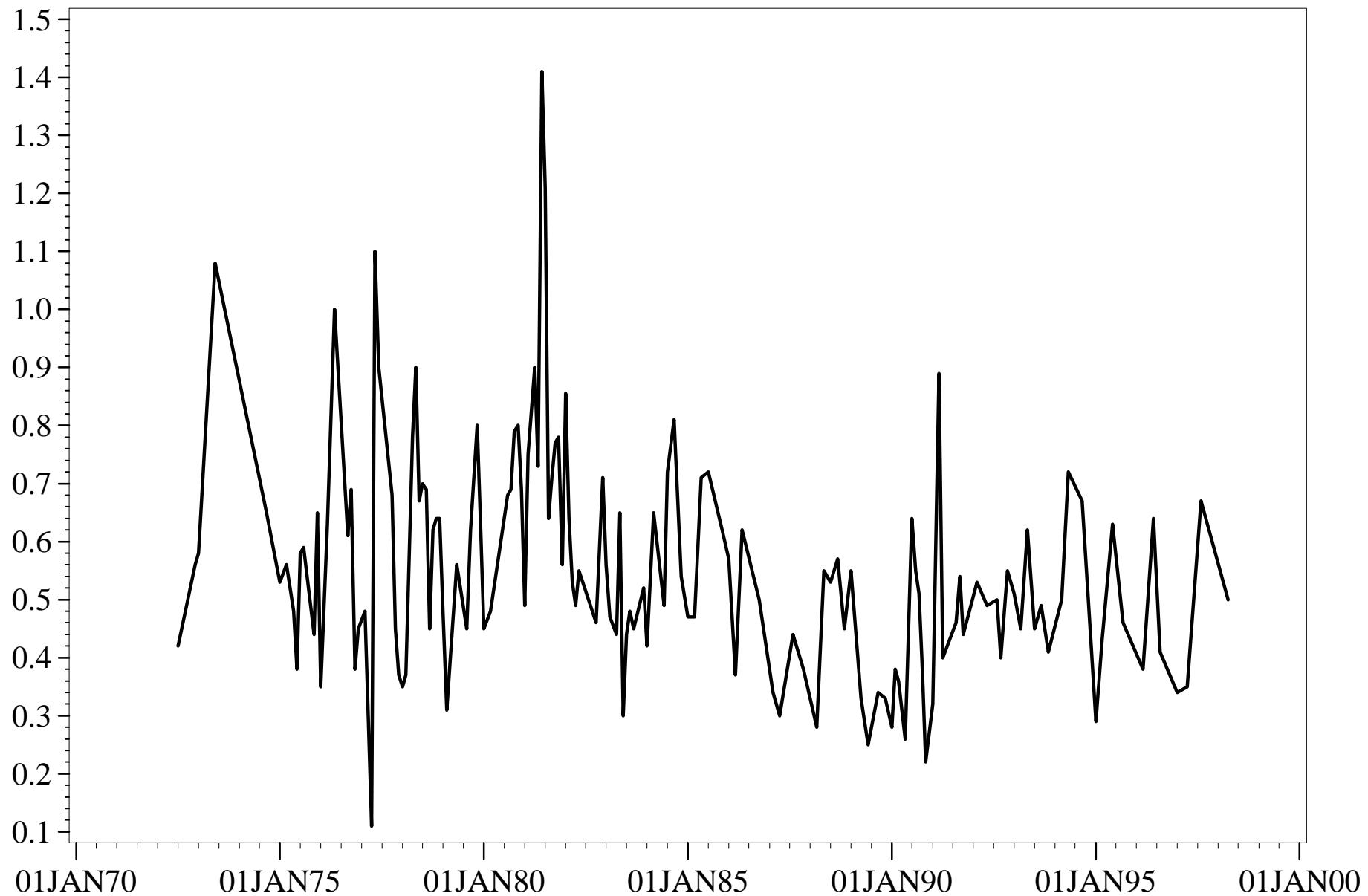
Adjusted for Seasonal Median and Detrended



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Total Phosphorous
(mg/L)

Horse Creek Trends Appendix - Display 100
Monthly Data Time Series
for Surface Total Phosphorous at FDEP Station 25020111
Unadjusted for Seasonal Medians

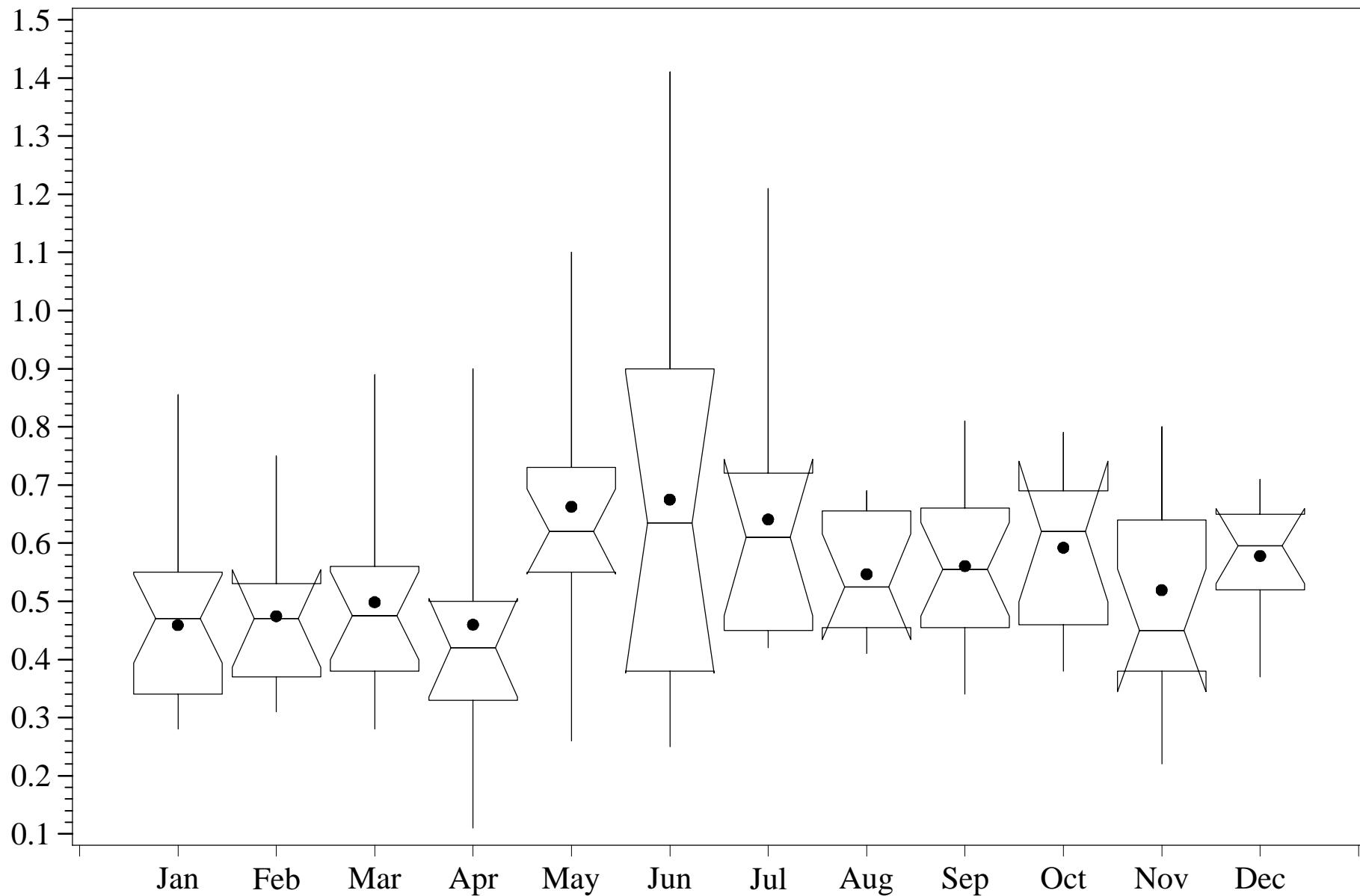


Horse Creek Trends Appendix - Display 101

Seasonal Univariate Statistics

for Surface Total Phosphorous at FDEP Station 25020111

Total Phosphorous
(mg/L)



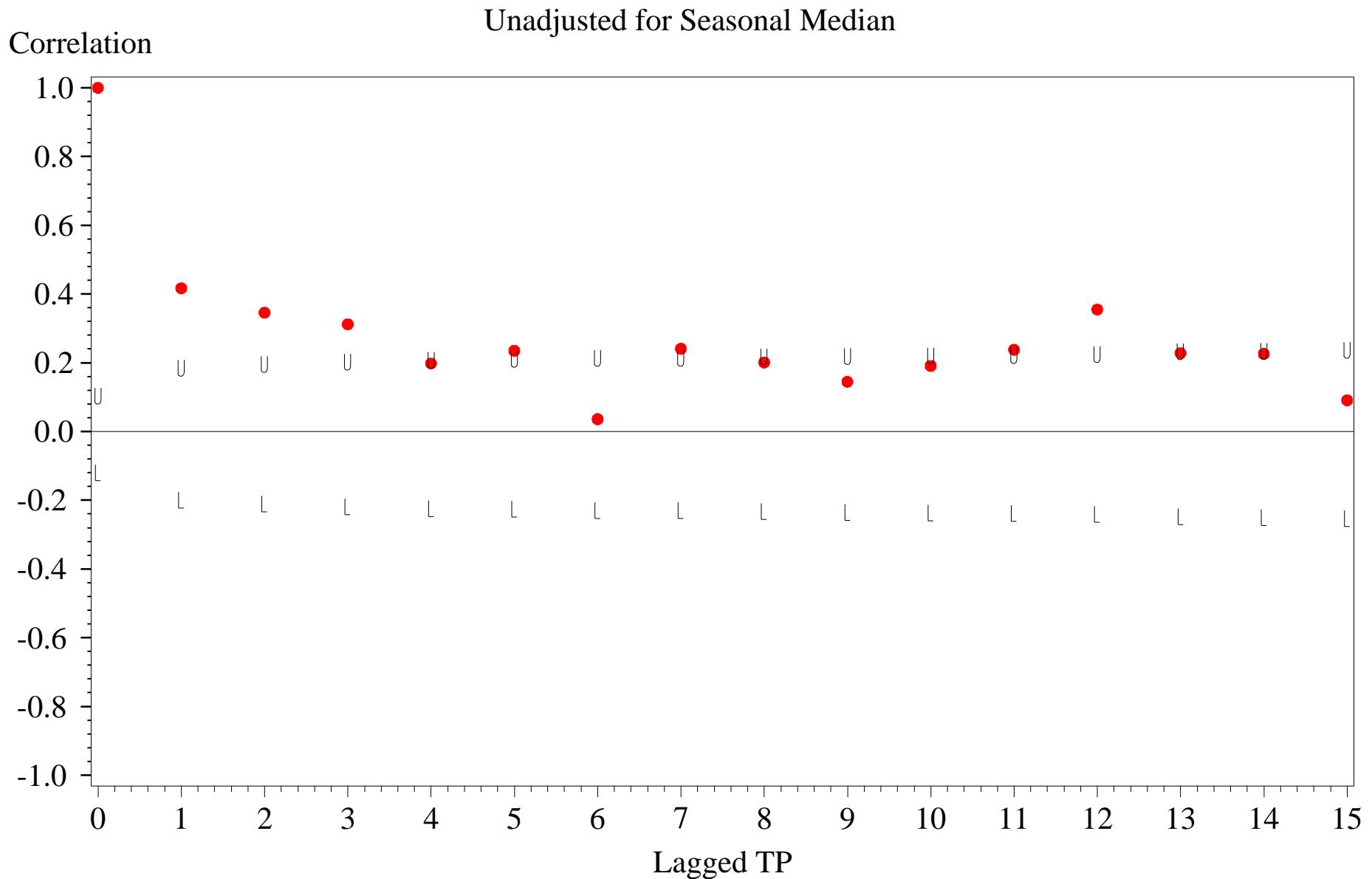
Horse Creek Trends Appendix - Display 102

Autocorrelation Statistics for Surface Total Phosphorous at FDEP Station 25020111

Unadjusted for Seasonal Medians

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.417	0.096	0.192	-0.192
2	0.346	0.102	0.203	-0.203
3	0.312	0.105	0.210	-0.210
4	0.198	0.108	0.216	-0.216
5	0.235	0.109	0.218	-0.218
6	0.036	0.111	0.221	-0.221
7	0.241	0.111	0.221	-0.221
8	0.201	0.112	0.225	-0.225
9	0.145	0.113	0.227	-0.227
10	0.191	0.114	0.228	-0.228
11	0.238	0.115	0.230	-0.230
12	0.355	0.117	0.233	-0.233
13	0.228	0.120	0.240	-0.240
14	0.226	0.121	0.242	-0.242
15	0.091	0.122	0.245	-0.245

Horse Creek Trends Appendix - Display 103
Correlogram for Surface Total Phosphorous at FDEP Station 25020111



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Horse Creek Trends Appendix - Display 104

Seasonal Kendall Tau Trend Test Statistics
for Surface Total Phosphorous at FDEP Station 25020111

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.219	.001	0.024	-.008

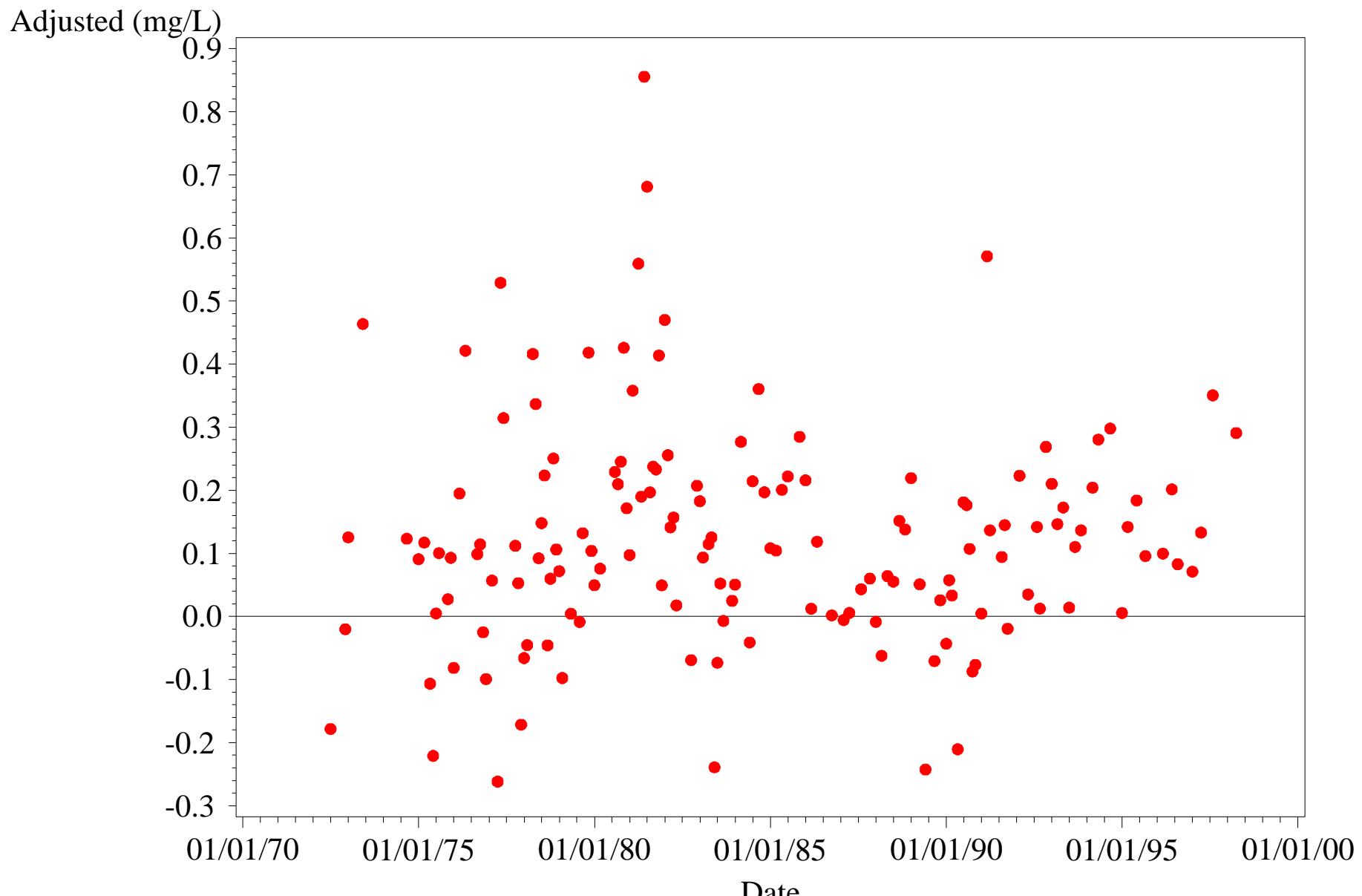
Horse Creek Trends Appendix - Display 105

Seasonal Kendall Tau Trend Test Statistics
for Surface Total Phosphorous at FDEP Station 25020111

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
-0.21868	.000622297	0.024372	-.00773504

Horse Creek Trends Appendix - Display 106
Time Series Plot of Surface Total Phosphorous Data Adjusted for Season and Detrended
at FDEP Station 25020111



Zero Reference Line Shown

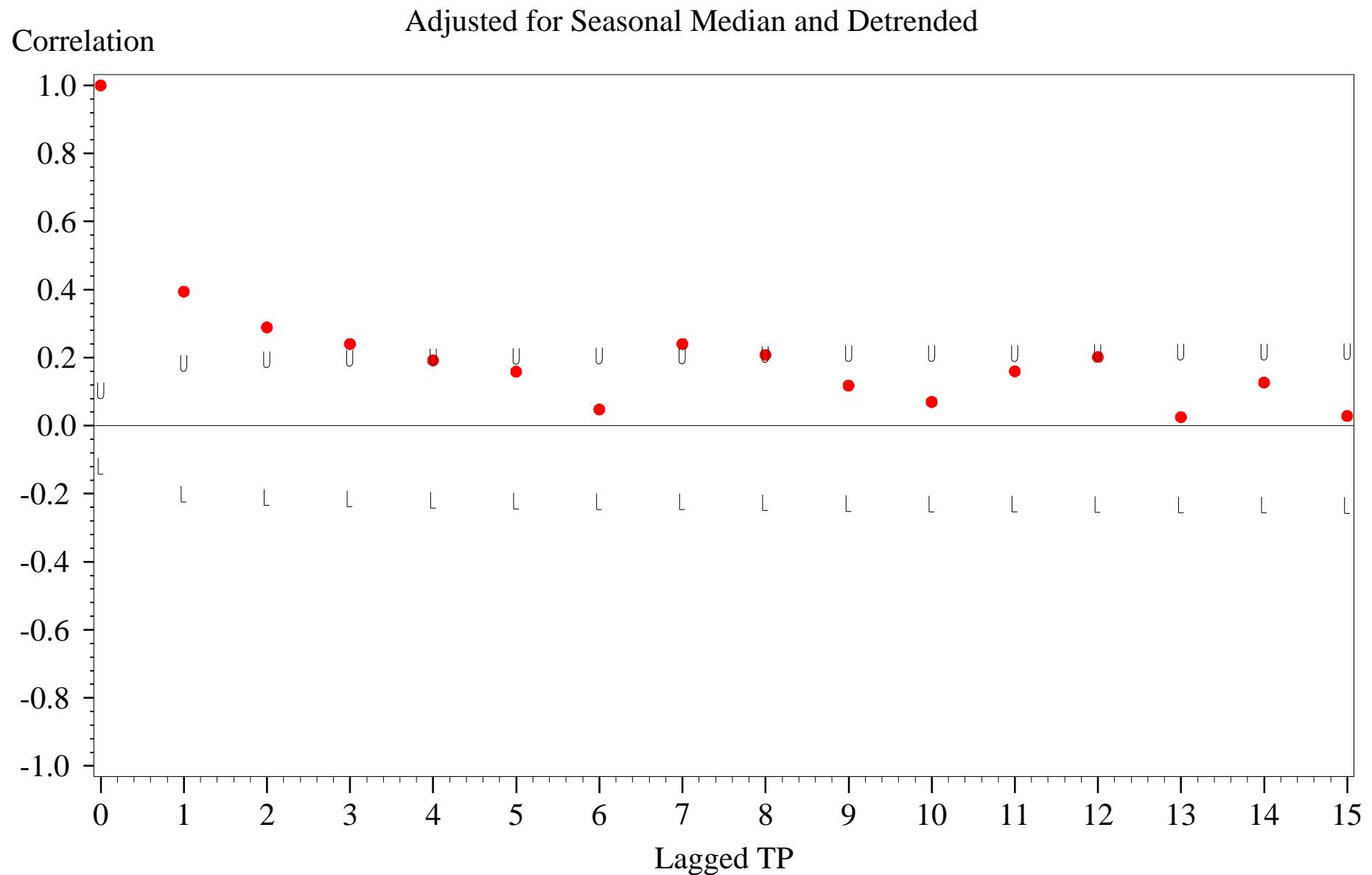
Horse Creek Trends Appendix - Display 107

Autocorrelation Statistics for Surface Total Phosphorous at FDEP Station 25020111

Adjusted for Seasonal Median and Detrended

Lagged TP	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.394	0.096	0.192	-0.192
2	0.289	0.101	0.202	-0.202
3	0.240	0.104	0.207	-0.207
4	0.192	0.105	0.211	-0.211
5	0.159	0.106	0.213	-0.213
6	0.048	0.107	0.214	-0.214
7	0.240	0.107	0.214	-0.214
8	0.208	0.109	0.218	-0.218
9	0.118	0.110	0.220	-0.220
10	0.070	0.110	0.221	-0.221
11	0.160	0.111	0.221	-0.221
12	0.202	0.111	0.223	-0.223
13	0.025	0.112	0.225	-0.225
14	0.127	0.112	0.225	-0.225
15	0.029	0.113	0.226	-0.226

Horse Creek Trends Appendix - Display 108
Correlogram for Surface Total Phosphorous at FDEP Station 25020111

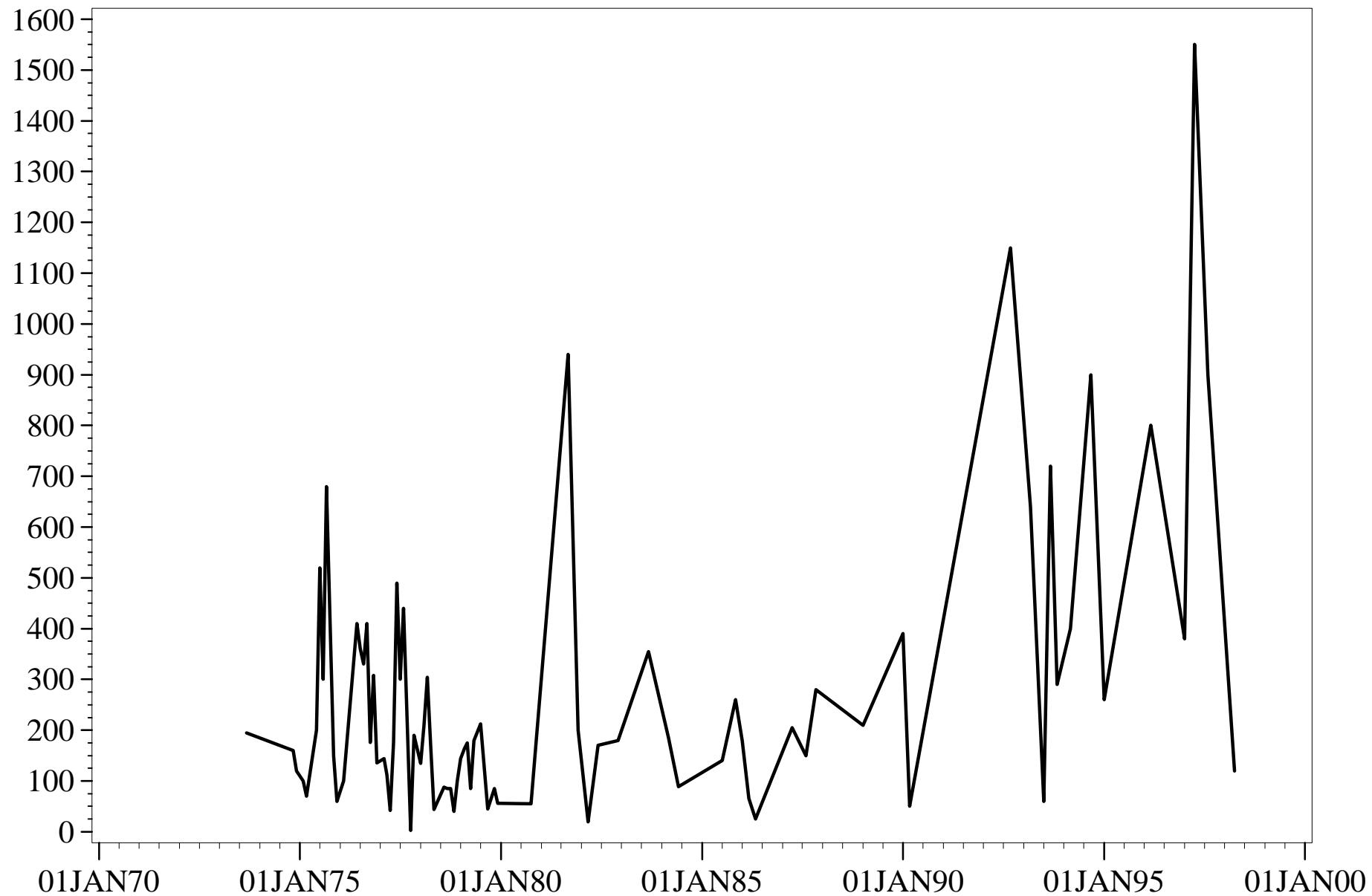


U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Horse Creek Trends Appendix - Display 109

Monthly Data Time Series

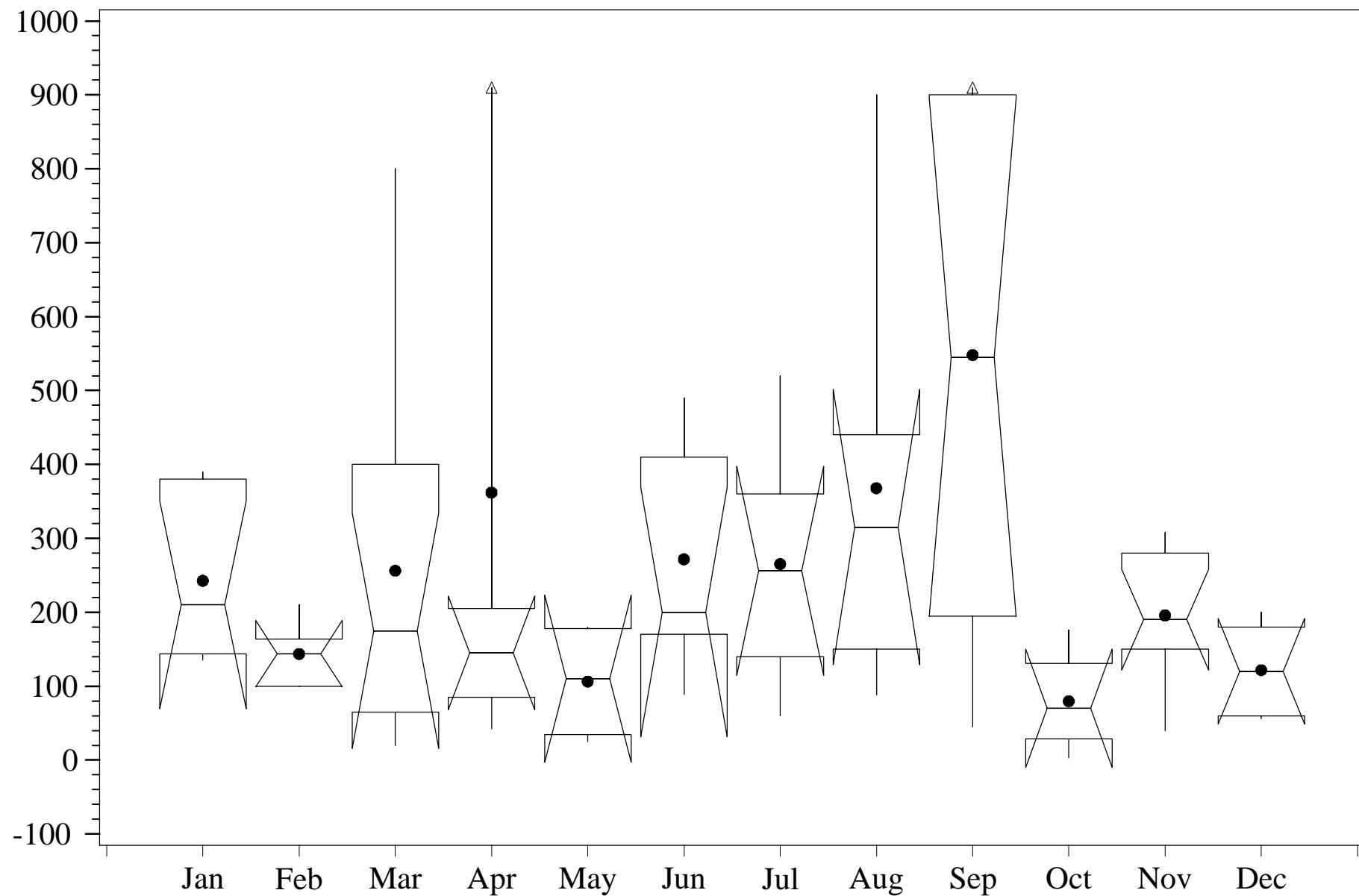
Total Coliform Bacteria for Surface Total Coliform Bacteria at FDEP Station 25020111
(Col/100ml) Unadjusted for Seasonal Medians



Horse Creek Trends Appendix - Display 110

Seasonal Univariate Statistics

Total Coliform Bacteria for Surface Total Coliform Bacteria at FDEP Station 25020111
(Col/100ml)



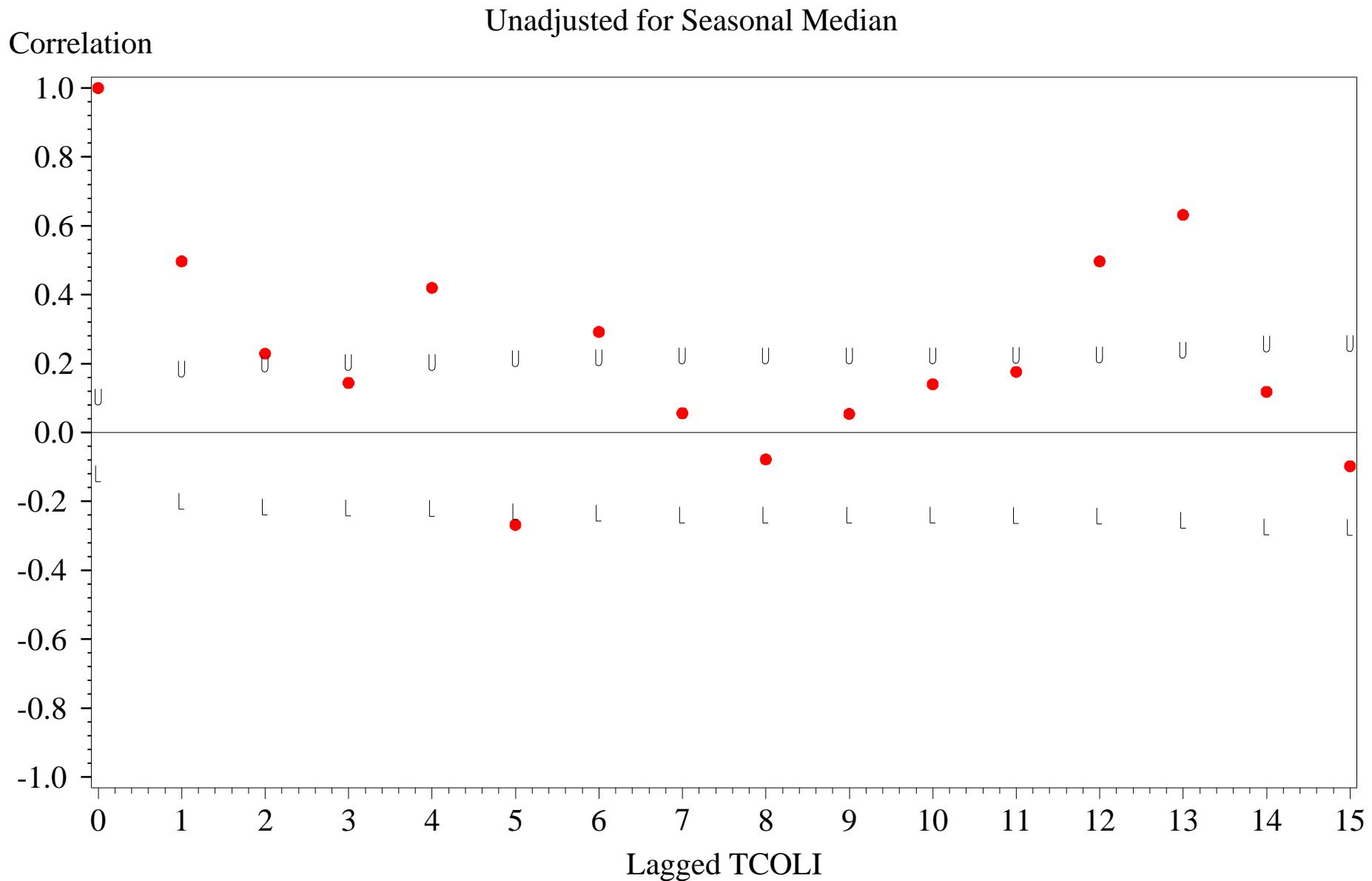
Horse Creek Trends Appendix - Display 111

Autocorrelation Statistics for Surface Total Coliform Bacteria at FDEP Station 25020111

Unadjusted for Seasonal Medians

Lagged TCOLI	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.497	0.096	0.192	-0.192
2	0.229	0.104	0.208	-0.208
3	0.144	0.105	0.211	-0.211
4	0.420	0.106	0.212	-0.212
5	-0.268	0.111	0.222	-0.222
6	0.292	0.113	0.226	-0.226
7	0.056	0.115	0.231	-0.231
8	-0.078	0.115	0.231	-0.231
9	0.054	0.116	0.231	-0.231
10	0.140	0.116	0.231	-0.231
11	0.176	0.116	0.232	-0.232
12	0.497	0.117	0.234	-0.234
13	0.632	0.123	0.247	-0.247
14	0.118	0.133	0.266	-0.266
15	-0.098	0.133	0.267	-0.267

Horse Creek Trends Appendix - Display 112
Correlogram for Surface Total Coliform Bacteria at FDEP Station 25020111



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown

Horse Creek Trends Appendix - Display 113

Seasonal Kendall Tau Trend Test Statistics
for Surface Total Coliform Bacteria at FDEP Station 25020111

Unadjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.235	0.016	0.045	9.231

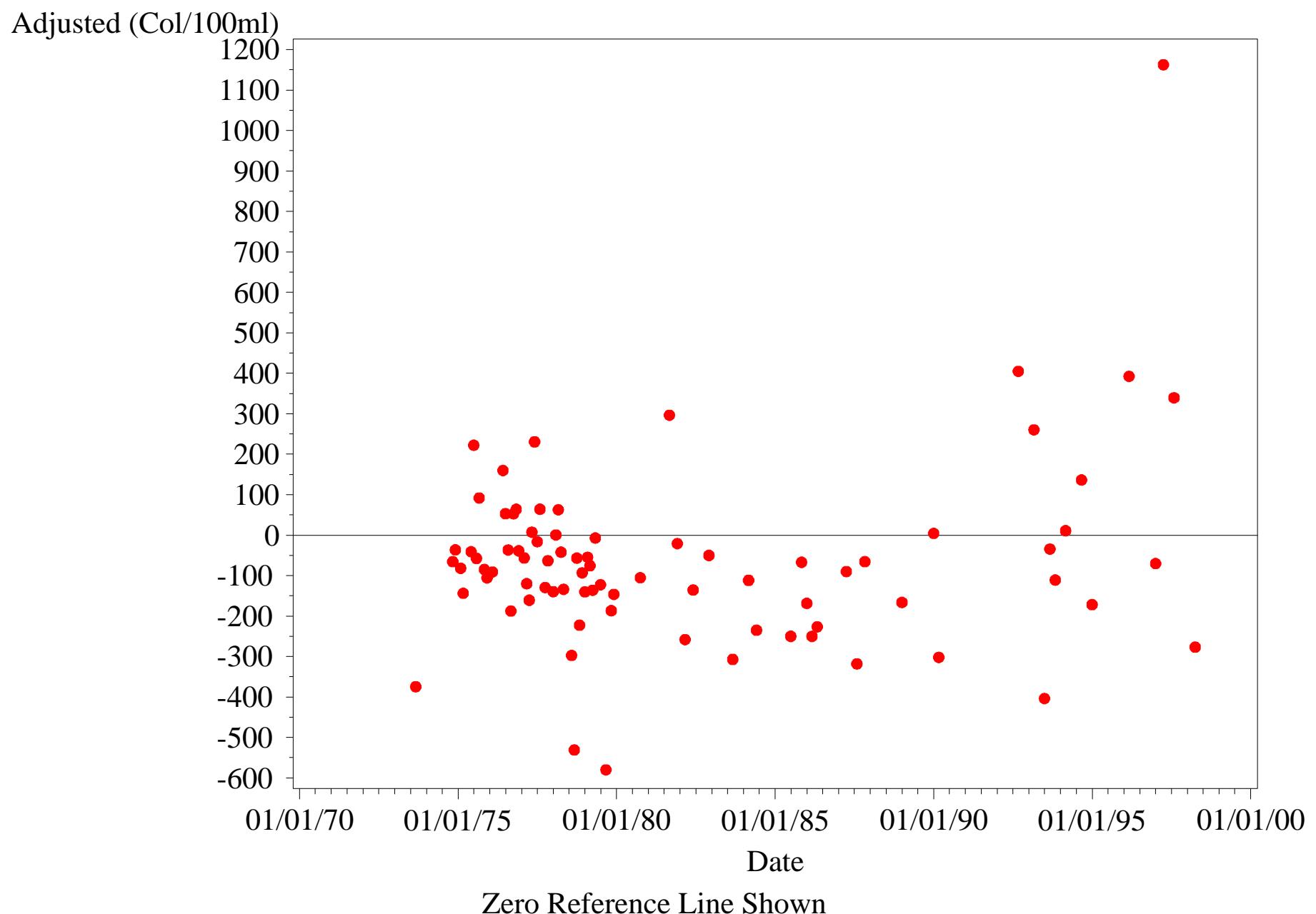
Horse Creek Trends Appendix - Display 114

Seasonal Kendall Tau Trend Test Statistics
for Surface Total Coliform Bacteria at FDEP Station 25020111

Adjusted for Seasonal Medians

Tau Statistic	P-Value Without Serial Correlation	P-Value With Serial Correlation	Slope Statistic
0.23529	0.016483	0.044726	9.23077

Horse Creek Trends Appendix - Display 115
Time Series Plot of Surface Total Coliform Bacteria Data Adjusted for Season and Detrended
at FDEP Station 25020111



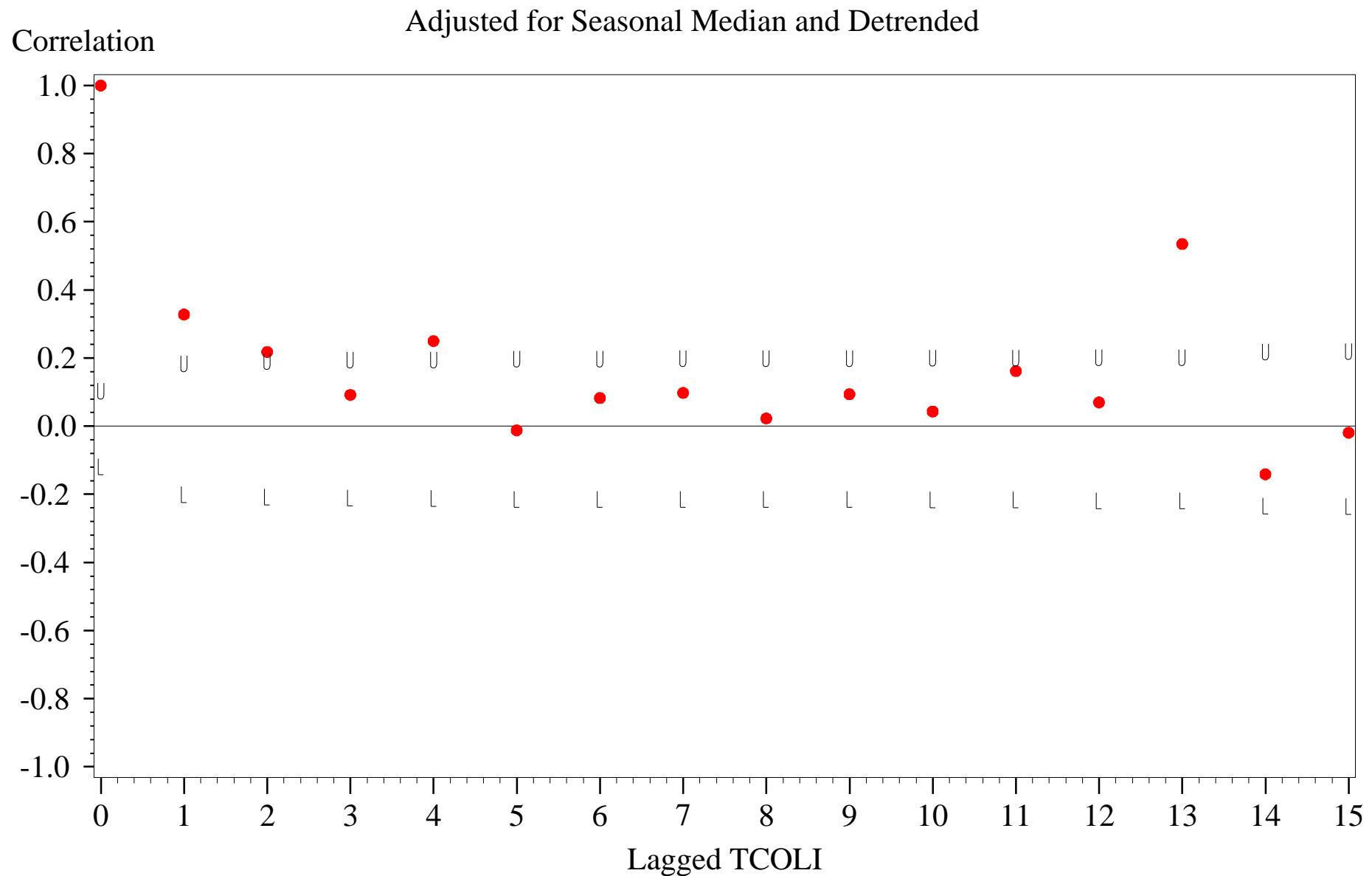
Horse Creek Trends Appendix - Display 116

Autocorrelation Statistics for Surface Total Coliform Bacteria at FDEP Station 25020111

Adjusted for Seasonal Median and Detrended

Lagged TCOLI	Correlation	Standard Error	Upper Limit	Lower Limit
0	1.000	0.056	0.111	-0.111
1	0.328	0.096	0.192	-0.192
2	0.218	0.100	0.199	-0.199
3	0.092	0.101	0.202	-0.202
4	0.250	0.101	0.203	-0.203
5	-0.012	0.103	0.206	-0.206
6	0.083	0.103	0.206	-0.206
7	0.098	0.103	0.207	-0.207
8	0.023	0.104	0.207	-0.207
9	0.094	0.104	0.207	-0.207
10	0.043	0.104	0.208	-0.208
11	0.162	0.104	0.208	-0.208
12	0.070	0.105	0.210	-0.210
13	0.535	0.105	0.210	-0.210
14	-0.141	0.113	0.226	-0.226
15	-0.019	0.114	0.227	-0.227

Horse Creek Trends Appendix - Display 117
Correlogram for Surface Total Coliform Bacteria at FDEP Station 25020111



U=Upper 95% Confidence Limit L=Lower 95% Confidence Limit
Zero Reference Line Shown