The SAS System

Obs	PLOT	T	BLK	TRT	PCTSEV	Y	YSTAR	WT
1	101	0	1	2	9	0.09	-2.31363	0.0819
2	102	0	1	1	6	0.06	-2.75154	0.0564
3	103	0	1	3	2	0.02	-3.89182	0.0196
4	201	0	2	2	7	0.07	-2.58669	0.0651
5	202	0	2	3	5	0.05	-2.94444	0.0475
6	203	0	2	1	3	0.03	-3.47610	0.0291
7	301	0	3	3	4	0.04	-3.17805	0.0384
8	302	0	3	2	2	0.02	-3.89182	0.0196
9	303	0	3	1	6	0.06	-2.75154	0.0564
10	401	0	4	1	1	0.01	-4.59512	0.0099
11	402	0	4	2	1	0.01	-4.59512	0.0099
12	403	0	4	3	4	0.04	-3.17805	0.0384
13	101	7	1	2	4	0.04	-3.17805	0.0384
14	102	7	1	1	6	0.06	-2.75154	0.0564
15	103	7	1	3	10	0.10	-2.19722	0.0900
16	201	7	2	2	2	0.02	-3.89182	0.0196
17	202	7	2	3	5	0.05	-2.94444	0.0475
18	203	7	2	1	3	0.03	-3.47610	0.0291
19	301	7	3	3	11	0.11	-2.09074	0.0979
20	302	7	3	2	6	0.06	-2.75154	0.0564
21	303	7	3	1	4	0.04	-3.17805	0.0384
22	401	7	4	1	8	0.08	-2.44235	0.0736
23	402	7	4	2	3	0.03	-3.47610	0.0291
24	403	7	4	3	6	0.06	-2.75154	0.0564
25	101	14	1	2	8	0.08	-2.44235	0.0736
26	102	14	1	1	20	0.20	-1.38629	0.1600
27	103	14	1	3	15	0.15	-1.73460	0.1275
28	201	14	2	2	13	0.13	-1.90096	0.1131
29	202	14	2	3	12	0.12	-1.99243	0.1056
30	203	14	2	1	14	0.14	-1.81529	0.1204
31	301	14	3	3	15	0.15	-1.73460	0.1275
32	302	14	3	2	8	0.08	-2.44235	0.0736
33	303	14	3	1	25	0.25	-1.09861	0.1875
34	401	14	4	1	17	0.17	-1.58563	0.1411
35	402	14	4	2	14	0.14	-1.81529	0.1204
36	403	14	4	3	49	0.49	-0.04001	0.2499
37	101	21	1	2	24	0.24	-1.15268	0.1824
38	102	21	1	1	38	0.38	-0.48955	0.2356
39	103	21	1	3	61	0.61	0.44731	0.2379
40	201	21	2	2	31	0.31	-0.80012	0.2139
41	202	21	2	3	42	0.42	-0.32277	0.2436

42	203	21	2	1	79	0.79	1.32493	0.1659
43	301	21	3	3	48	0.48	-0.08004	0.2496
44	302	21	3	2	23	0.23	-1.20831	0.1771
45	303	21	3	1	86	0.86	1.81529	0.1204
46	401	21	4	1	52	0.52	0.08004	0.2496
47	402	21	4	2	45	0.45	-0.20067	0.2475
48	403	21	4	3	56	0.56	0.24116	0.2464
49	101	28	1	2	28	0.28	-0.94446	0.2016
50	102	28	1	1	89	0.89	2.09074	0.0979
51	103	28	1	3	44	0.44	-0.24116	0.2464
52	201	28	2	2	41	0.41	-0.36397	0.2419
53	202	28	2	3	49	0.49	-0.04001	0.2499
54	203	28	2	1	79	0.79	1.32493	0.1659
55	301	28	3	3	45	0.45	-0.20067	0.2475
56	302	28	3	2	47	0.47	-0.12014	0.2491
57	303	28	3	1	63	0.63	0.53222	0.2331
58	401	28	4	1	94	0.94	2.75154	0.0564
59	402	28	4	2	52	0.52	0.08004	0.2496
60	403	28	4	3	64	0.64	0.57536	0.2304
61	101	35	1	2	36	0.36	-0.57536	0.2304
62	102	35	1	1	77	0.77	1.20831	0.1771
63	103	35	1	3	88	0.88	1.99243	0.1056
64	201	35	2	2	42	0.42	-0.32277	0.2436
65	202	35	2	3	69	0.69	0.80012	0.2139
66	203	35	2	1	71	0.71	0.89538	0.2059
67	301	35	3	3	43	0.43	-0.28185	0.2451
68	302	35	3	2	39	0.39	-0.44731	0.2379
69	303	35	3	1	84	0.84	1.65823	0.1344
70	401	35	4	1	97	0.97	3.47610	0.0291
71	402	35	4	2	47	0.47	-0.12014	0.2491
72	403	35	4	3	76	0.76	1.15268	0.1824

The SAS System

The Mixed Procedure

Model Information	
Data Set	WORK.A
Dependent Variable	YSTAR
Weight Variable	WT
Covariance Structures	Variance Components, Autoregressive
Subject Effect	BLK*TRT
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Between-Within

Class Level Information		
Class	Levels	Values
BLK	4	1 2 3 4
TRT	3	1 2 3

Dimensions	
Covariance Parameters	3
Columns in X	8
Columns in Z	4
Subjects	1
Max Obs per Subject	72

Number of Observations	
Number of Observations Read	72
Number of Observations Used	72
Number of Observations Not Used	0

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	192.28596787	
1	2	190.52569900	0.00000001

Convergence criteria met.

Estimated R Matrix for BLK*TRT 1 1/Weighted by WT						
Row	Col1	Col2	Col3	Col4	Col5	Col6
1	1.1255	0.06984	0.002573	0.000132	0.000013	5.843E-7
2	0.06984	1.1255	0.04147	0.002120	0.000204	9.416E-6
3	0.002573	0.04147	0.3968	0.02029	0.001953	0.000090
4	0.000132	0.002120	0.02029	0.2694	0.02594	0.001197
5	0.000013	0.000204	0.001953	0.02594	0.6484	0.02991

6	5.843E-7	9.416E-6	0.000090	0.001197	0.02991	0.3584

Estimated R Correlation Matrix for BLK*TRT 1 1/Weighted by WT

Row	Col1	Col2	Col3	Col4	Col5	Col6
1	1.0000	0.06205	0.003850	0.000239	0.000015	9.198E-7
2	0.06205	1.0000	0.06205	0.003850	0.000239	0.000015
3	0.003850	0.06205	1.0000	0.06205	0.003850	0.000239
4	0.000239	0.003850	0.06205	1.0000	0.06205	0.003850
5	0.000015	0.000239	0.003850	0.06205	1.0000	0.06205
6	9.198E-7	0.000015	0.000239	0.003850	0.06205	1.0000

Covariance Parameter Estimates

Cov Parm	Subject	Estimate	Standard Error	Z Value	Pr Z
BLK		0.03558	0.05317	0.67	0.2517
AR(1)	BLK*TRT	0.06205	0.1560	0.40	0.6908
Residual		0.06348	0.01172	5.42	<.0001

Fit Statistics

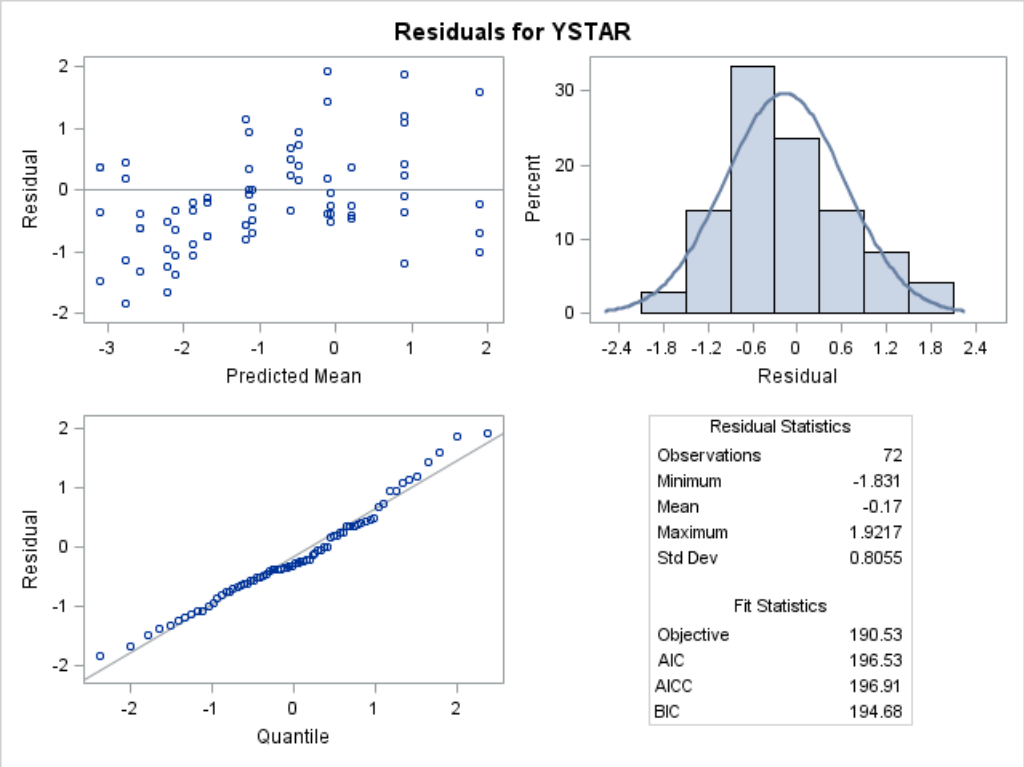
-2 Res Log Likelihood	190.5
AIC (Smaller is Better)	196.5
AICC (Smaller is Better)	196.9
BIC (Smaller is Better)	194.7

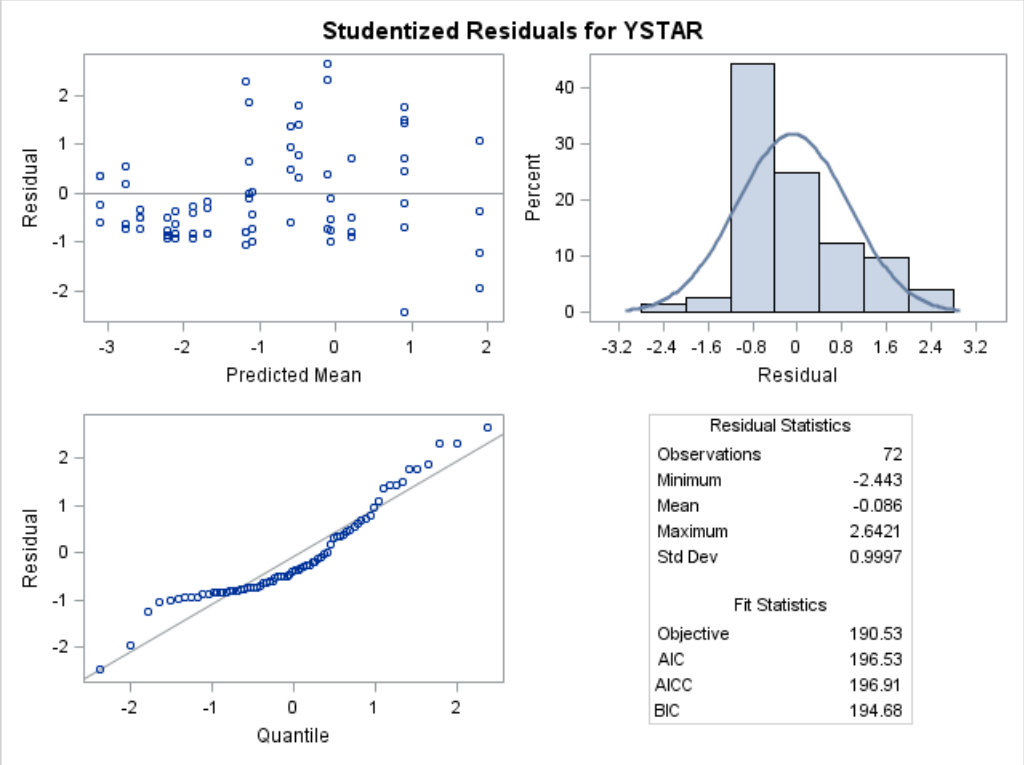
Solution for Fixed Effects

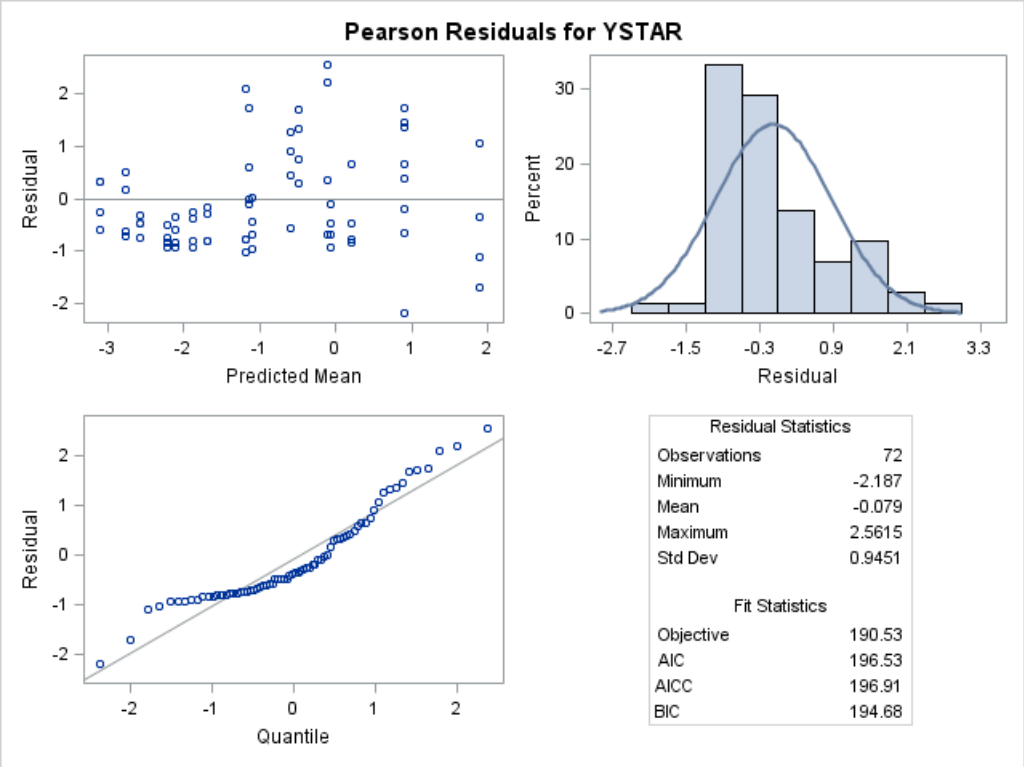
Effect	TRT	Estimate	Standard Error	DF	t Value	Pr > |t|
Intercept		-2.5690	0.3630	9	-7.08	<.0001
TRT	1	-0.5406	0.5136	9	-1.05	0.3200
TRT	2	-0.1948	0.5193	9	-0.38	0.7162
TRT	3	0	.	.	.	.
T		0.09927	0.01422	57	6.98	<.0001
T*TRT	1	0.04374	0.02127	57	2.06	0.0443
T*TRT	2	-0.02217	0.02030	57	-1.09	0.2794
T*TRT	3	0	.	.	.	.

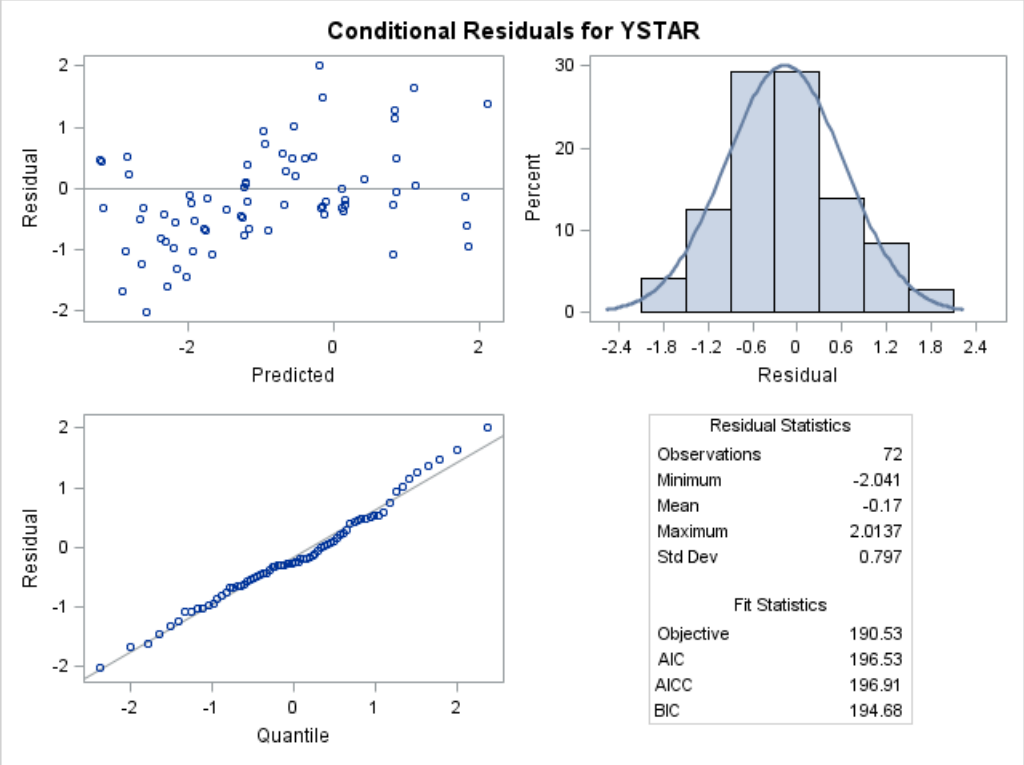
Type 3 Tests of Fixed Effects

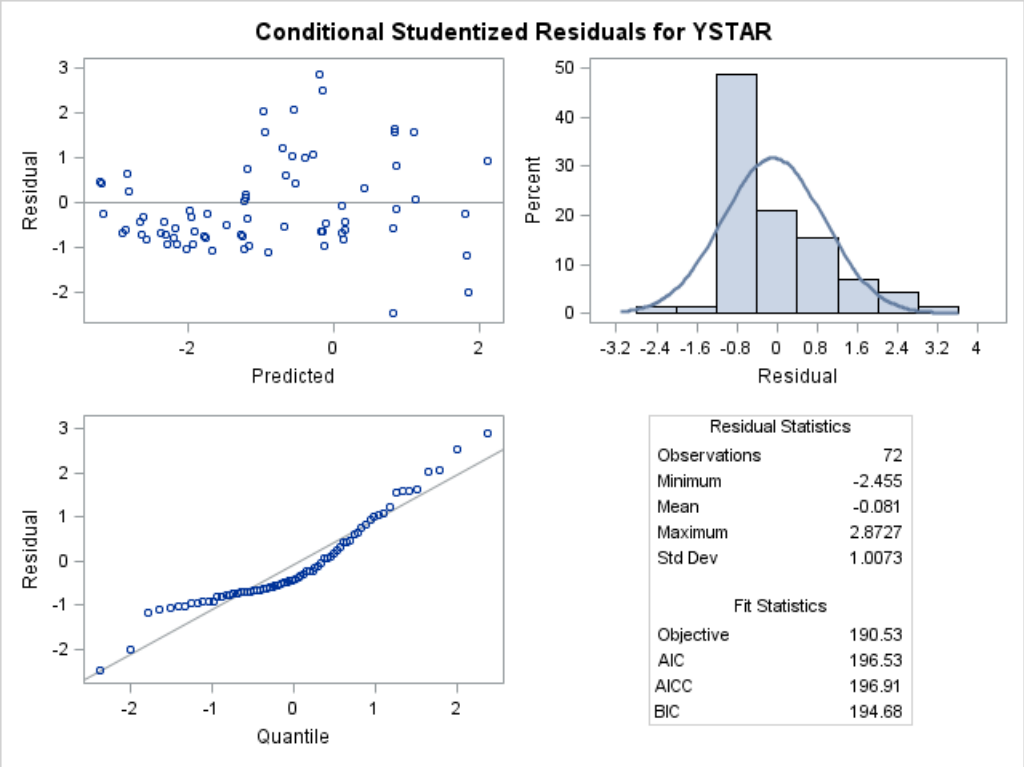
Effect	Num DF	Den DF	F Value	Pr > F
TRT	2	9	0.56	0.5892
T	1	57	153.62	<.0001
T*TRT	2	57	4.80	0.0118

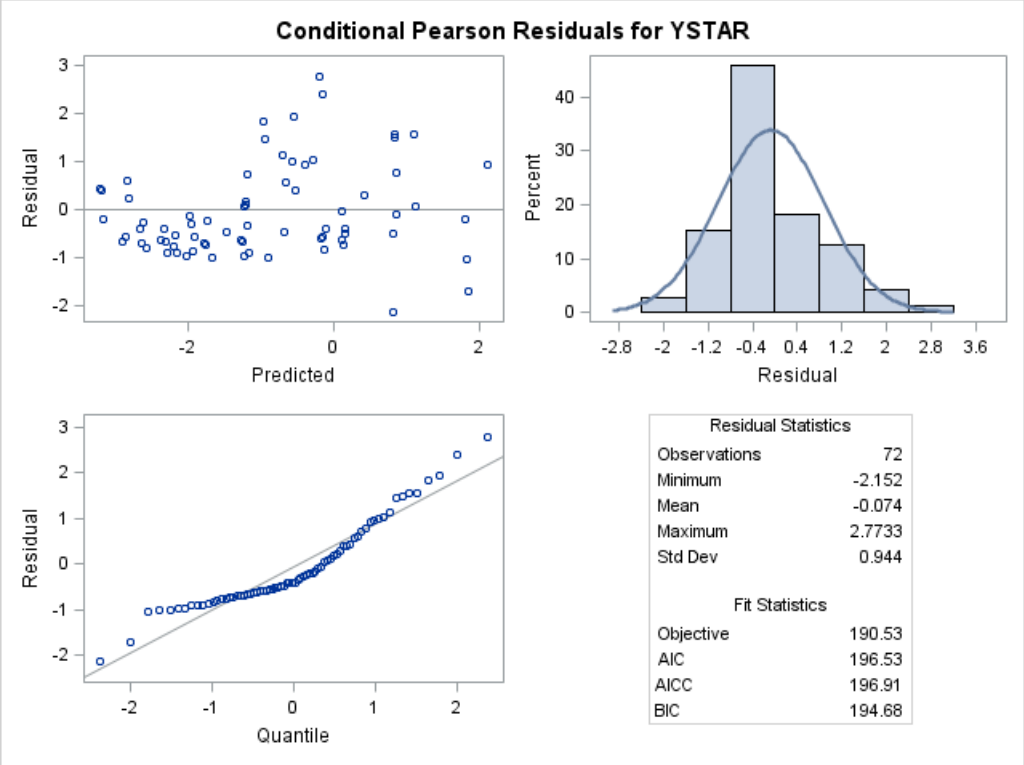

Residuals for YSTAR
Residual
Predicted Mean
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 72
Minimum -1.831
Mean -0.17
Maximum 1.9217
Std Dev 0.8055
Fit Statistics
Objective 190.53
AIC 196.53
AICC 196.91
BIC 194.68


Studentized Residuals for YSTAR
Residual
Predicted Mean
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 72
Minimum -2.443
Mean -0.086
Maximum 2.6421
Std Dev 0.9997
Fit Statistics
Objective 190.53
AIC 196.53
AICC 196.91
BIC 194.68


Pearson Residuals for YSTAR
Residual
Predicted Mean
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 72
Minimum -2.187
Mean -0.079
Maximum 2.5615
Std Dev 0.9451
Fit Statistics
Objective 190.53
AIC 196.53
AICC 196.91
BIC 194.68


Conditional Residuals for YSTAR
Residual
Predicted
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 72
Minimum -2.041
Mean -0.17
Maximum 2.0137
Std Dev 0.797
Fit Statistics
Objective 190.53
AIC 196.53
AICC 196.91
BIC 194.68


Conditional Studentized Residuals for YSTAR
Residual
Predicted
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 72
Minimum -2.455
Mean -0.081
Maximum 2.8727
Std Dev 1.0073
Fit Statistics
Objective 190.53
AIC 196.53
AICC 196.91
BIC 194.68


Conditional Pearson Residuals for YSTAR
Residual
Predicted
Percent
Residual
Residual
Quantile
Residual Statistics
Observations 72
Minimum -2.152
Mean -0.074
Maximum 2.7733
Std Dev 0.944
Fit Statistics
Objective 190.53
AIC 196.53
AICC 196.91
BIC 194.68

The SAS System

The Mixed Procedure

Model Information	
Data Set	WORK.A
Dependent Variable	YSTAR
Weight Variable	WT
Covariance Structures	Variance Components, Autoregressive
Subject Effect	BLK*TRT
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Between-Within

Class Level Information		
Class	Levels	Values
BLK	4	1 2 3 4
TRT	3	1 2 3

Dimensions	
Covariance Parameters	3
Columns in X	6
Columns in Z	4
Subjects	1
Max Obs per Subject	72

Number of Observations	
Number of Observations Read	72
Number of Observations Used	72
Number of Observations Not Used	0

Iteration History			
Iteration	Evaluations	-2 Res Log Like	Criterion
0	1	192.28596787	
1	2	190.52569900	0.00000001

Convergence criteria met.

Covariance Parameter Estimates		
Cov Parm	Subject	Estimate
BLK		0.03558
AR(1)	BLK*TRT	0.06205
Residual		0.06348

Fit Statistics	
-2 Res Log Likelihood	190.5

AIC (Smaller is Better)	196.5
AICC (Smaller is Better)	196.9
BIC (Smaller is Better)	194.7

Solution for Fixed Effects

Effect	TRT	Estimate	Standard Error	DF	t Value	Pr > |t|
TRT	1	-3.1096	0.3878	9	-8.02	<.0001
TRT	2	-2.7638	0.3945	9	-7.01	<.0001
TRT	3	-2.5690	0.3630	9	-7.08	<.0001
T*TRT	1	0.1430	0.01586	57	9.02	<.0001
T*TRT	2	0.07710	0.01449	57	5.32	<.0001
T*TRT	3	0.09927	0.01422	57	6.98	<.0001

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
TRT	3	9	48.58	<.0001
T*TRT	3	57	52.75	<.0001

Estimates

Label	Estimate	Standard Error	DF	t Value	Pr > |t|
TRT1 S VS TRT2 S	0.06591	0.02149	57	3.07	0.0033
TRT1 S VS TRT3 S	0.04374	0.02127	57	2.06	0.0443
TRT2 S VS TRT3 S	-0.02217	0.02030	57	-1.09	0.2794

Least Squares Means

Effect	TRT	T	Estimate	Standard Error	DF	t Value	Pr > |t|
TRT	1	0.00	-3.1096	0.3878	9	-8.02	<.0001
TRT	2	0.00	-2.7638	0.3945	9	-7.01	<.0001
TRT	3	0.00	-2.5690	0.3630	9	-7.08	<.0001
TRT	1	7.00	-2.1085	0.2947	9	-7.15	<.0001
TRT	2	7.00	-2.2241	0.3063	9	-7.26	<.0001
TRT	3	7.00	-1.8741	0.2783	9	-6.73	<.0001
TRT	1	14.00	-1.1074	0.2192	9	-5.05	0.0007
TRT	2	14.00	-1.6844	0.2294	9	-7.34	<.0001
TRT	3	14.00	-1.1792	0.2073	9	-5.69	0.0003
TRT	1	21.00	-0.1064	0.1839	9	-0.58	0.5772
TRT	2	21.00	-1.1447	0.1788	9	-6.40	0.0001
TRT	3	21.00	-0.4844	0.1683	9	-2.88	0.0182
TRT	1	28.00	0.8947	0.2104	9	4.25	0.0021
TRT	2	28.00	-0.6050	0.1786	9	-3.39	0.0080
TRT	3	28.00	0.2105	0.1829	9	1.15	0.2795
TRT	1	35.00	1.8958	0.2816	9	6.73	<.0001
TRT	2	35.00	-0.06536	0.2289	9	-0.29	0.7817

TRT	3	35.00	0.9054	0.2417	9	3.75	0.0046

Differences of Least Squares Means

Effect	TRT	_TRT	T	Estimate	Standard Error	DF	t Value	Pr > |t|
TRT	1	2	0.00	-0.3458	0.5371	9	-0.64	0.5357
TRT	1	3	0.00	-0.5406	0.5136	9	-1.05	0.3200
TRT	2	3	0.00	-0.1948	0.5193	9	-0.38	0.7162
TRT	1	2	7.00	0.1156	0.4038	9	0.29	0.7811
TRT	1	3	7.00	-0.2344	0.3825	9	-0.61	0.5552
TRT	2	3	7.00	-0.3500	0.3919	9	-0.89	0.3950
TRT	1	2	14.00	0.5770	0.2879	9	2.00	0.0760
TRT	1	3	14.00	0.07180	0.2705	9	0.27	0.7967
TRT	2	3	14.00	-0.5052	0.2790	9	-1.81	0.1036
TRT	1	2	21.00	1.0384	0.2191	9	4.74	0.0011
TRT	1	3	21.00	0.3780	0.2107	9	1.79	0.1064
TRT	2	3	21.00	-0.6604	0.2061	9	-3.20	0.0108
TRT	1	2	28.00	1.4998	0.2417	9	6.20	0.0002
TRT	1	3	28.00	0.6842	0.2448	9	2.79	0.0209
TRT	2	3	28.00	-0.8156	0.2180	9	-3.74	0.0046
TRT	1	2	35.00	1.9611	0.3378	9	5.81	0.0003
TRT	1	3	35.00	0.9904	0.3462	9	2.86	0.0187
TRT	2	3	35.00	-0.9707	0.3049	9	-3.18	0.0111

The SAS System

Obs	PLOT	T	BLK	TRT	PCTSEV	Y	YSTAR	WT	Pred	StdErrPred	DF	Alpha	Lower	Upper	Resid
1	101	0	1	2	9	0.09	-2.31363	0.0819	-2.76380	0.39447	66	0.05	-3.55139	-1.97621	0.45017
2	102	0	1	1	6	0.06	-2.75154	0.0564	-3.10959	0.38776	66	0.05	-3.88377	-2.33540	0.35805
3	103	0	1	3	2	0.02	-3.89182	0.0196	-2.56898	0.36295	66	0.05	-3.29364	-1.84432	-1.32284
4	201	0	2	2	7	0.07	-2.58669	0.0651	-2.76380	0.39447	66	0.05	-3.55139	-1.97621	0.17711
5	202	0	2	3	5	0.05	-2.94444	0.0475	-2.56898	0.36295	66	0.05	-3.29364	-1.84432	-0.37546
6	203	0	2	1	3	0.03	-3.47610	0.0291	-3.10959	0.38776	66	0.05	-3.88377	-2.33540	-0.36651
7	301	0	3	3	4	0.04	-3.17805	0.0384	-2.56898	0.36295	66	0.05	-3.29364	-1.84432	-0.60907
8	302	0	3	2	2	0.02	-3.89182	0.0196	-2.76380	0.39447	66	0.05	-3.55139	-1.97621	-1.12802
9	303	0	3	1	6	0.06	-2.75154	0.0564	-3.10959	0.38776	66	0.05	-3.88377	-2.33540	0.35805
10	401	0	4	1	1	0.01	-4.59512	0.0099	-3.10959	0.38776	66	0.05	-3.88377	-2.33540	-1.48553
11	402	0	4	2	1	0.01	-4.59512	0.0099	-2.76380	0.39447	66	0.05	-3.55139	-1.97621	-1.83132
12	403	0	4	3	4	0.04	-3.17805	0.0384	-2.56898	0.36295	66	0.05	-3.29364	-1.84432	-0.60907
13	101	7	1	2	4	0.04	-3.17805	0.0384	-2.22411	0.30630	66	0.05	-2.83566	-1.61256	-0.95394
14	102	7	1	1	6	0.06	-2.75154	0.0564	-2.10851	0.29474	66	0.05	-2.69699	-1.52004	-0.64302
15	103	7	1	3	10	0.10	-2.19722	0.0900	-1.87411	0.27830	66	0.05	-2.42975	-1.31847	-0.32311
16	201	7	2	2	2	0.02	-3.89182	0.0196	-2.22411	0.30630	66	0.05	-2.83566	-1.61256	-1.66771
17	202	7	2	3	5	0.05	-2.94444	0.0475	-1.87411	0.27830	66	0.05	-2.42975	-1.31847	-1.07033
18	203	7	2	1	3	0.03	-3.47610	0.0291	-2.10851	0.29474	66	0.05	-2.69699	-1.52004	-1.36758
19	301	7	3	3	11	0.11	-2.09074	0.0979	-1.87411	0.27830	66	0.05	-2.42975	-1.31847	-0.21663
20	302	7	3	2	6	0.06	-2.75154	0.0564	-2.22411	0.30630	66	0.05	-2.83566	-1.61256	-0.52742
21	303	7	3	1	4	0.04	-3.17805	0.0384	-2.10851	0.29474	66	0.05	-2.69699	-1.52004	-1.06954
22	401	7	4	1	8	0.08	-2.44235	0.0736	-2.10851	0.29474	66	0.05	-2.69699	-1.52004	-0.33383
23	402	7	4	2	3	0.03	-3.47610	0.0291	-2.22411	0.30630	66	0.05	-2.83566	-1.61256	-1.25199
24	403	7	4	3	6	0.06	-2.75154	0.0564	-1.87411	0.27830	66	0.05	-2.42975	-1.31847	-0.87743
25	101	14	1	2	8	0.08	-2.44235	0.0736	-1.68443	0.22936	66	0.05	-2.14235	-1.22650	-0.75792
26	102	14	1	1	20	0.20	-1.38629	0.1600	-1.10744	0.21915	66	0.05	-1.54500	-0.66989	-0.27885
27	103	14	1	3	15	0.15	-1.73460	0.1275	-1.17924	0.20731	66	0.05	-1.59314	-0.76534	-0.55536
28	201	14	2	2	13	0.13	-1.90096	0.1131	-1.68443	0.22936	66	0.05	-2.14235	-1.22650	-0.21653
29	202	14	2	3	12	0.12	-1.99243	0.1056	-1.17924	0.20731	66	0.05	-1.59314	-0.76534	-0.81319
30	203	14	2	1	14	0.14	-1.81529	0.1204	-1.10744	0.21915	66	0.05	-1.54500	-0.66989	-0.70785
31	301	14	3	3	15	0.15	-1.73460	0.1275	-1.17924	0.20731	66	0.05	-1.59314	-0.76534	-0.55536
32	302	14	3	2	8	0.08	-2.44235	0.0736	-1.68443	0.22936	66	0.05	-2.14235	-1.22650	-0.75792
33	303	14	3	1	25	0.25	-1.09861	0.1875	-1.10744	0.21915	66	0.05	-1.54500	-0.66989	0.00883
34	401	14	4	1	17	0.17	-1.58563	0.1411	-1.10744	0.21915	66	0.05	-1.54500	-0.66989	-0.47818
35	402	14	4	2	14	0.14	-1.81529	0.1204	-1.68443	0.22936	66	0.05	-2.14235	-1.22650	-0.13086
36	403	14	4	3	49	0.49	-0.04001	0.2499	-1.17924	0.20731	66	0.05	-1.59314	-0.76534	1.13923
37	101	21	1	2	24	0.24	-1.15268	0.1824	-1.14474	0.17878	66	0.05	-1.50169	-0.78778	-0.00794
38	102	21	1	1	38	0.38	-0.48955	0.2356	-0.10637	0.18391	66	0.05	-0.47355	0.26081	-0.38318
39	103	21	1	3	61	0.61	0.44731	0.2379	-0.48437	0.16826	66	0.05	-0.82031	-0.14843	0.93168
40	201	21	2	2	31	0.31	-0.80012	0.2139	-1.14474	0.17878	66	0.05	-1.50169	-0.78778	0.34462

41	202	21	2	3	42	0.42	-0.32277	0.2436	-0.48437	0.16826	66	0.05	-0.82031	-0.14843	0.16159
42	203	21	2	1	79	0.79	1.32493	0.1659	-0.10637	0.18391	66	0.05	-0.47355	0.26081	1.43130
43	301	21	3	3	48	0.48	-0.08004	0.2496	-0.48437	0.16826	66	0.05	-0.82031	-0.14843	0.40432
44	302	21	3	2	23	0.23	-1.20831	0.1771	-1.14474	0.17878	66	0.05	-1.50169	-0.78778	-0.06357
45	303	21	3	1	86	0.86	1.81529	0.1204	-0.10637	0.18391	66	0.05	-0.47355	0.26081	1.92166
46	401	21	4	1	52	0.52	0.08004	0.2496	-0.10637	0.18391	66	0.05	-0.47355	0.26081	0.18641
47	402	21	4	2	45	0.45	-0.20067	0.2475	-1.14474	0.17878	66	0.05	-1.50169	-0.78778	0.94407
48	403	21	4	3	56	0.56	0.24116	0.2464	-0.48437	0.16826	66	0.05	-0.82031	-0.14843	0.72553
49	101	28	1	2	28	0.28	-0.94446	0.2016	-0.60505	0.17860	66	0.05	-0.96163	-0.24847	-0.33941
50	102	28	1	1	89	0.89	2.09074	0.0979	0.89470	0.21037	66	0.05	0.47469	1.31471	1.19604
51	103	28	1	3	44	0.44	-0.24116	0.2464	0.21051	0.18291	66	0.05	-0.15469	0.57570	-0.45167
52	201	28	2	2	41	0.41	-0.36397	0.2419	-0.60505	0.17860	66	0.05	-0.96163	-0.24847	0.24108
53	202	28	2	3	49	0.49	-0.04001	0.2499	0.21051	0.18291	66	0.05	-0.15469	0.57570	-0.25051
54	203	28	2	1	79	0.79	1.32493	0.1659	0.89470	0.21037	66	0.05	0.47469	1.31471	0.43022
55	301	28	3	3	45	0.45	-0.20067	0.2475	0.21051	0.18291	66	0.05	-0.15469	0.57570	-0.41118
56	302	28	3	2	47	0.47	-0.12014	0.2491	-0.60505	0.17860	66	0.05	-0.96163	-0.24847	0.48491
57	303	28	3	1	63	0.63	0.53222	0.2331	0.89470	0.21037	66	0.05	0.47469	1.31471	-0.36248
58	401	28	4	1	94	0.94	2.75154	0.0564	0.89470	0.21037	66	0.05	0.47469	1.31471	1.85683
59	402	28	4	2	52	0.52	0.08004	0.2496	-0.60505	0.17860	66	0.05	-0.96163	-0.24847	0.68509
60	403	28	4	3	64	0.64	0.57536	0.2304	0.21051	0.18291	66	0.05	-0.15469	0.57570	0.36486
61	101	35	1	2	36	0.36	-0.57536	0.2304	-0.06536	0.22892	66	0.05	-0.52242	0.39169	-0.51000
62	102	35	1	1	77	0.77	1.20831	0.1771	1.89577	0.28165	66	0.05	1.33344	2.45810	-0.68746
63	103	35	1	3	88	0.88	1.99243	0.1056	0.90538	0.24169	66	0.05	0.42283	1.38792	1.08705
64	201	35	2	2	42	0.42	-0.32277	0.2436	-0.06536	0.22892	66	0.05	-0.52242	0.39169	-0.25741
65	202	35	2	3	69	0.69	0.80012	0.2139	0.90538	0.24169	66	0.05	0.42283	1.38792	-0.10526
66	203	35	2	1	71	0.71	0.89538	0.2059	1.89577	0.28165	66	0.05	1.33344	2.45810	-1.00039
67	301	35	3	3	43	0.43	-0.28185	0.2451	0.90538	0.24169	66	0.05	0.42283	1.38792	-1.18723
68	302	35	3	2	39	0.39	-0.44731	0.2379	-0.06536	0.22892	66	0.05	-0.52242	0.39169	-0.38195
69	303	35	3	1	84	0.84	1.65823	0.1344	1.89577	0.28165	66	0.05	1.33344	2.45810	-0.23754
70	401	35	4	1	97	0.97	3.47610	0.0291	1.89577	0.28165	66	0.05	1.33344	2.45810	1.58033
71	402	35	4	2	47	0.47	-0.12014	0.2491	-0.06536	0.22892	66	0.05	-0.52242	0.39169	-0.05478
72	403	35	4	3	76	0.76	1.15268	0.1824	0.90538	0.24169	66	0.05	0.42283	1.38792	0.24730

The SAS System

The REG Procedure
Model: MODEL1
Dependent Variable: YSTAR

Number of Observations Read	72
Number of Observations Used	72

Analysis of Variance

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	203.84793	203.84793	371.02	<.0001
Error	70	38.45976	0.54943		
Corrected Total	71	242.30769			

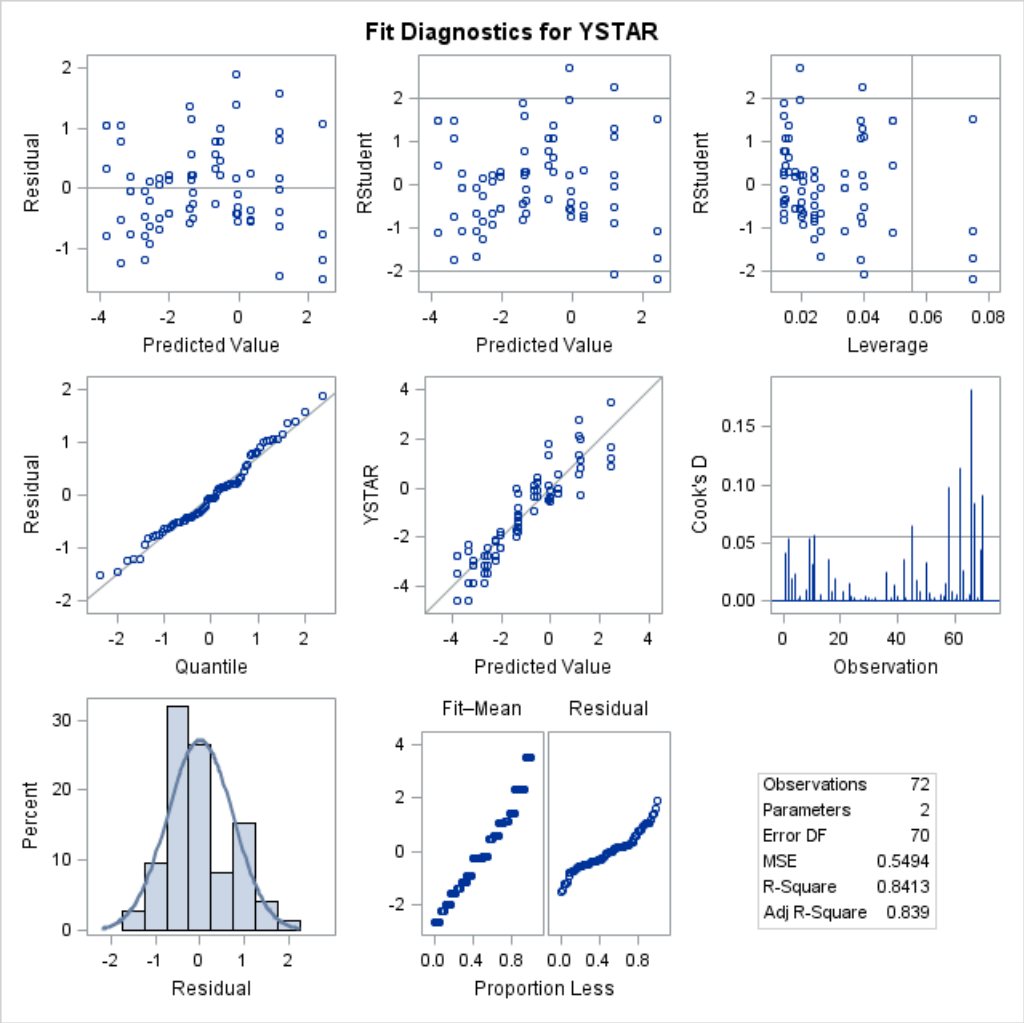
Root MSE	0.74123	R-Square	0.8413
Dependent Mean	-1.12135	Adj R-Sq	0.8390
Coeff Var	-66.10194		

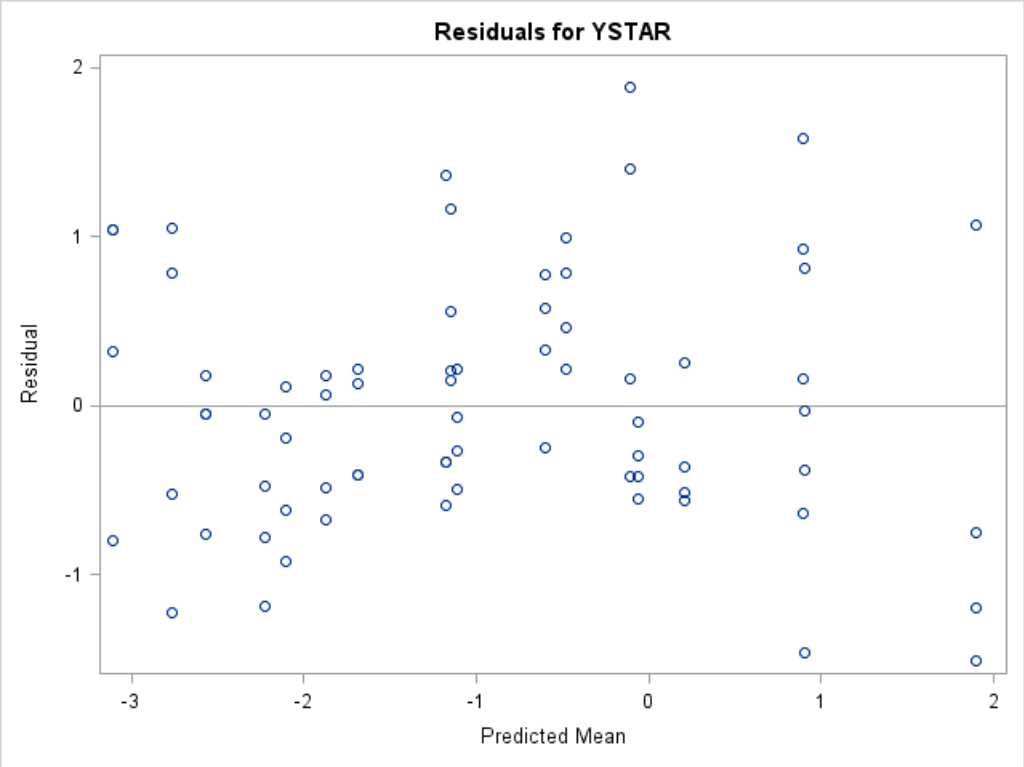
Parameter Estimates

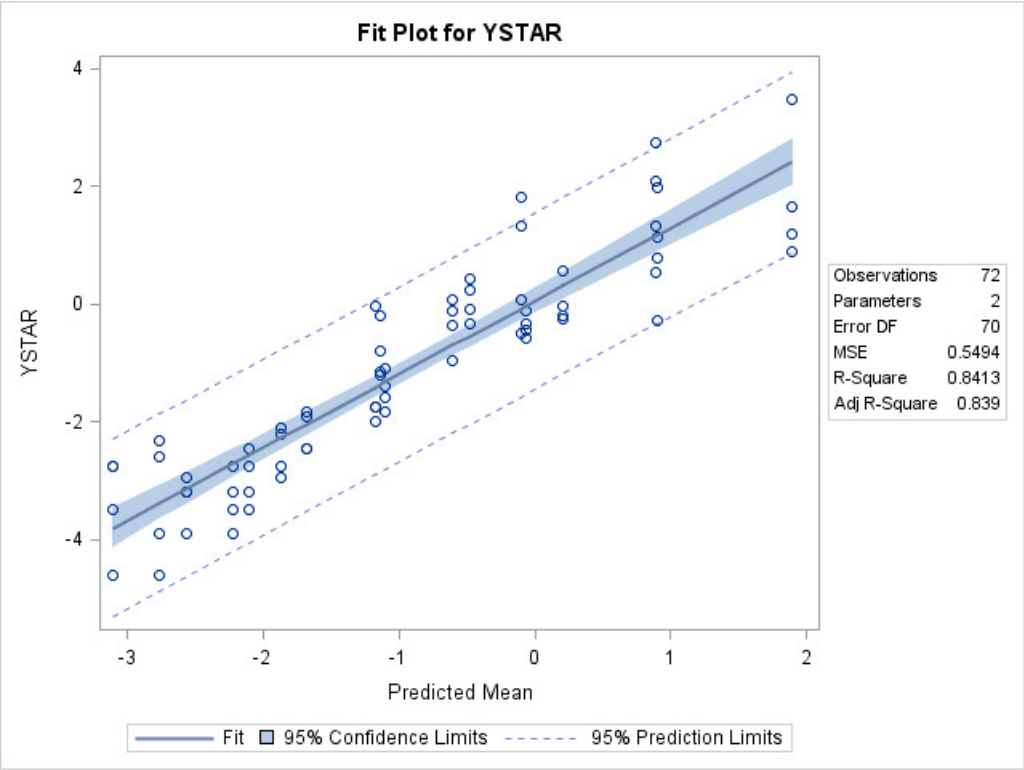
Variable	Label	DF	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	Intercept	1	0.05756	0.10666	0.54	0.5912
Pred	Predicted Mean	1	1.23952	0.06435	19.26	<.0001

The SAS System

The REG Procedure
Model: MODEL1
Dependent Variable: YSTAR




Residuals for YSTAR
Residual
Predicted Mean
2
1
0
-1
-3
-2
-1
0
1
2


Fit Plot for YSTAR
YSTAR
Predicted Mean
4
2
0
-2
-4
-3
-2
-1
0
1
2
Observations 72
Parameters 2
Error DF 70
MSE 0.5494
R-Square 0.8413
Adj R-Square 0.839
Fit
95% Confidence Limits
95% Prediction Limits