Obs	density	block	fertilizer	yield
1	1	1	1	177.22869228
2	2	2	1	177.55004127
3	1	3	1	176.40846185
4	2	4	1	177.70362548
5	1	1	1	177.12548634
6	2	2	1	176.77834248
7	1	3	1	176.7463019
8	2	4	1	177.06116422
9	1	1	1	176.2749493
10	2	2	1	177.96720293
11	1	3	1	176.60129983
12	2	4	1	177.0305428
13	1	1	1	177.47950716
14	2	2	1	176.8741298
15	1	3	1	176.11438832
16	2	4	1	176.00839451
17	1	1	1	176.10831259
18	2	2	1	178.35744091
19	1	3	1	177.26244508
20	2	4	1	176.91884494
21	1	1	1	176.23901578
22	2	2	1	176.57306975
23	1	3	1	176.03929794
24	2	4	1	176.81792217
25	1	1	1	176.1605865
26	2	2	1	177.22642413
27	1	3	1	175.93853303
28	2	4	1	177.16493668
29	1	1	1	175.3608396
30	2	2	1	177.27699568
31	1	3	1	175.9454438
32	2	4	1	175.88277962
33	1	1	2	176.47934092
34	2	2	2	176.04434212
35	1	3	2	177.41246175
36	2	4	2	177.36081824
37	1	1	2	177.38549918
38	2	2	2	176.9758077
39	1	3	2	177.37977869
40	2	4	2	177.99799506
41	1	1	2	176.43486257
42	2	2	2	176.93326509
43	1	3	2	175.98348017
44	2	4	2	177.03409266
45	1	1	2	176.43676237
46	2	2	2	176.06774497
47	1	3	2	177.12104863
48	2	4	2	177.19772137
49	1	1	2	176.60372408

Obs	density	block	fertilizer	yield
50	2	2	2	177.20817143
51	1	3	2	177.1488286
52	2	4	2	176.8190767
53	1	1	2	176.99906695
54	2	2	2	178.13460458
55	1	3	2	176.429156
56	2	4	2	176.66832294
57	1	1	2	176.89586686
58	2	2	2	177.77949286
59	1	3	2	176.414495
60	2	4	2	176.87889774
61	1	1	2	177.58068308
62	2	2	2	176.95726892
63	1	3	2	175.74754558
64	2	4	2	177.35259508
65	1	1	3	177.1041864
66	2	2	3	178.07963517
67	1	3	3	176.90342215
68	2	4	3	177.54028416
69	1	1	3	177.0327097
70	2	2	3	178.28604192
71	1	3	3	176.40541023
72	2	4	3	176.43083013
73	1	1	3	177.39633064
74	2	2	3	176.92557578
75	1	3	3	177.05504578
76	2	4	3	177.34416395
77	1	1	3	177.12836753
78	2	2	3	177.1683022
79	1	3	3	176.35394064
80	2	4	3	179.06089904
81	1	1	3	176.30051705
82	2	2	3	177.59335238
83	1	3	3	177.11524524
84	2	4	3	177.79445744
85	1	1	3	177.0040381
86	2	2	3	178.03685837
87	1	3	3	177.70136628
88	2	4	3	177.63280826
89	1	1	3	177.65227461
90	2	2	3	177.10041786
91	1	3	3	177.18796703
92	2	4	3	177.40529186
93	1	1	3	178.14164436
94	2	2	3	177.71061254
95	1	3	3	177.68726436
96	2	4	3	177.11817598

The ANOVA Procedure

Class Level Information		
Class	Levels	Values
density	2	1 2

Number of Observations Read	96
Number of Observations Used	96

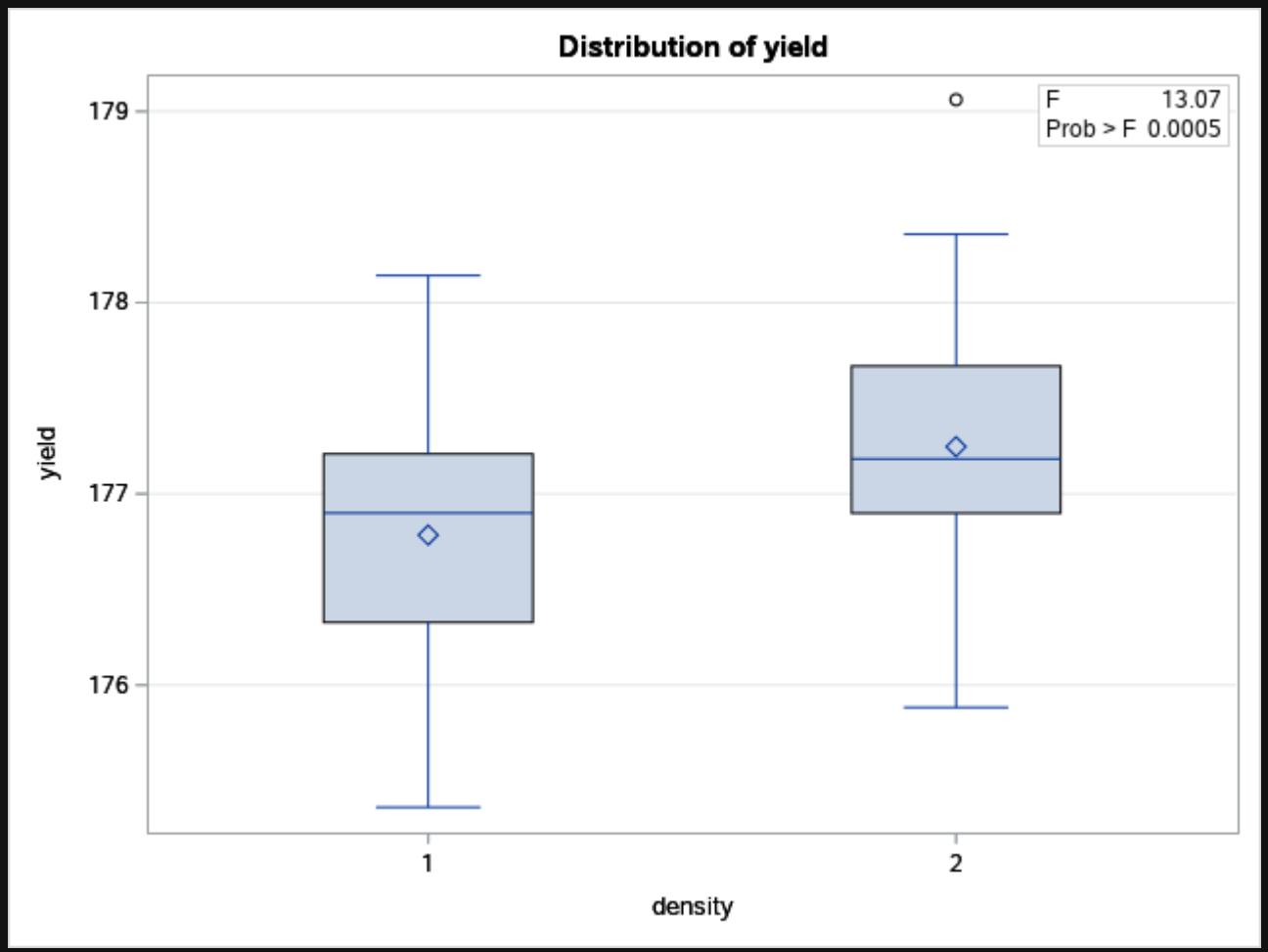
The ANOVA Procedure

Dependent Variable: yield

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	5.12168125	5.12168125	13.07	0.0005
Error	94	36.83255154	0.39183565		
Corrected Total	95	41.95423279			

R-Square	Coeff Var	Root MSE	yield Mean
0.122078	0.353623	0.625968	177.0155

Source	DF	Anova SS	Mean Square	F Value	Pr > F
density	1	5.12168125	5.12168125	13.07	0.0005



The TTEST Procedure

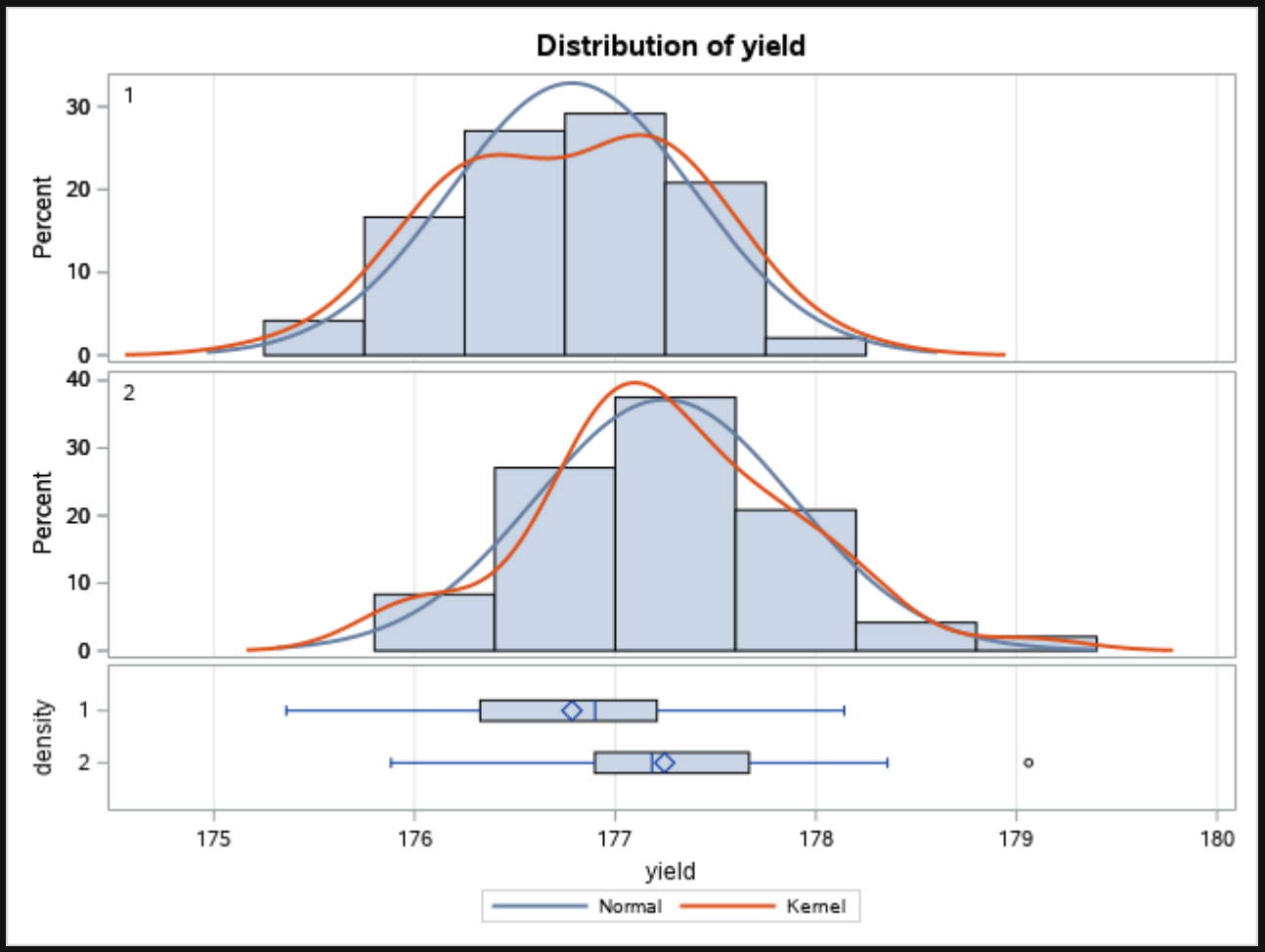
Variable: yield

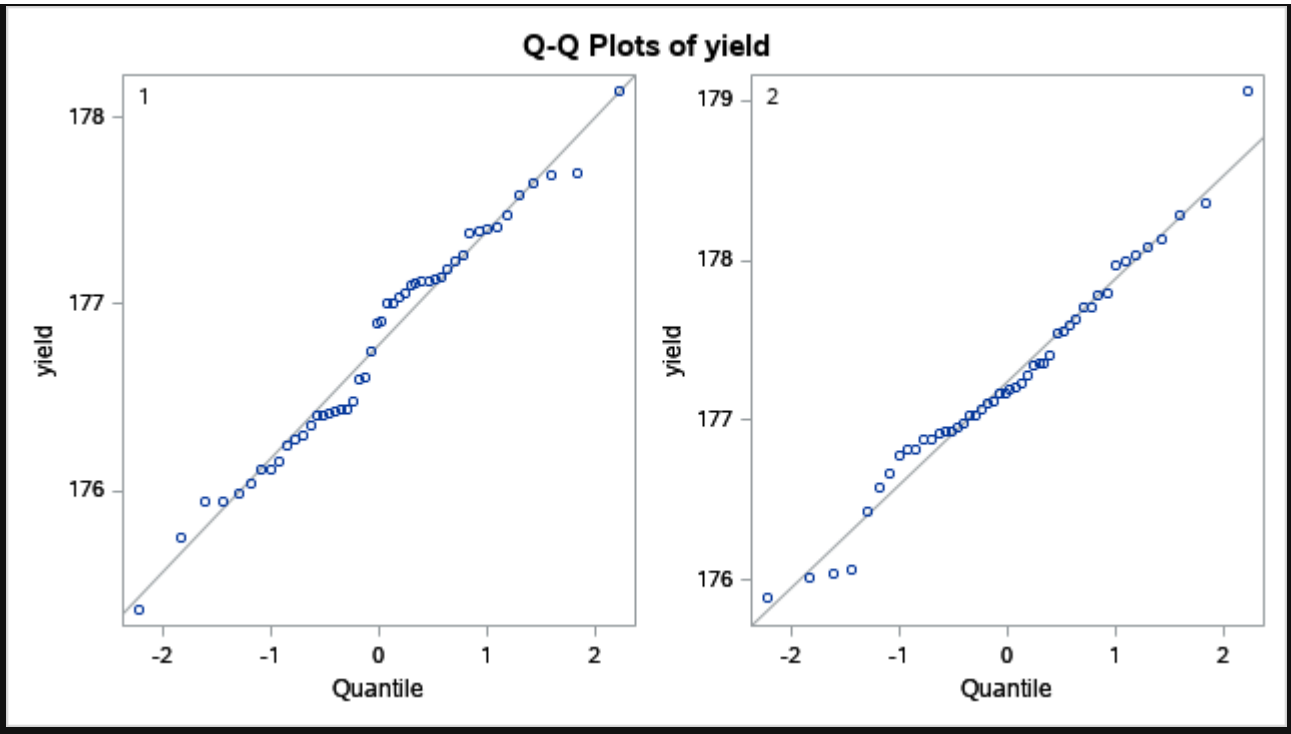
density	Method	N	Mean	Std Dev	Std Err	Minimum	Maximum
1		48	176.8	0.6072	0.0876	175.4	178.1
2		48	177.2	0.6441	0.0930	175.9	179.1
Diff (1-2)	Pooled		-0.4620	0.6260	0.1278		
Diff (1-2)	Satterthwaite		-0.4620		0.1278		

density	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
1		176.8	176.6	177.0	0.6072	0.5055	0.7606
2		177.2	177.1	177.4	0.6441	0.5362	0.8068
Diff (1-2)	Pooled	-0.4620	-0.7157	-0.2083	0.6260	0.5479	0.7303
Diff (1-2)	Satterthwaite	-0.4620	-0.7157	-0.2082			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	94	-3.62	0.0005
Satterthwaite	Unequal	93.675	-3.62	0.0005

Equality of Variances				
Method	Num DF	Den DF	F Value	Pr > F
Folded F	47	47	1.13	0.6876





The ANOVA Procedure

Class Level Information		
Class	Levels	Values
block	4	1 2 3 4

Number of Observations Read	96
Number of Observations Used	96

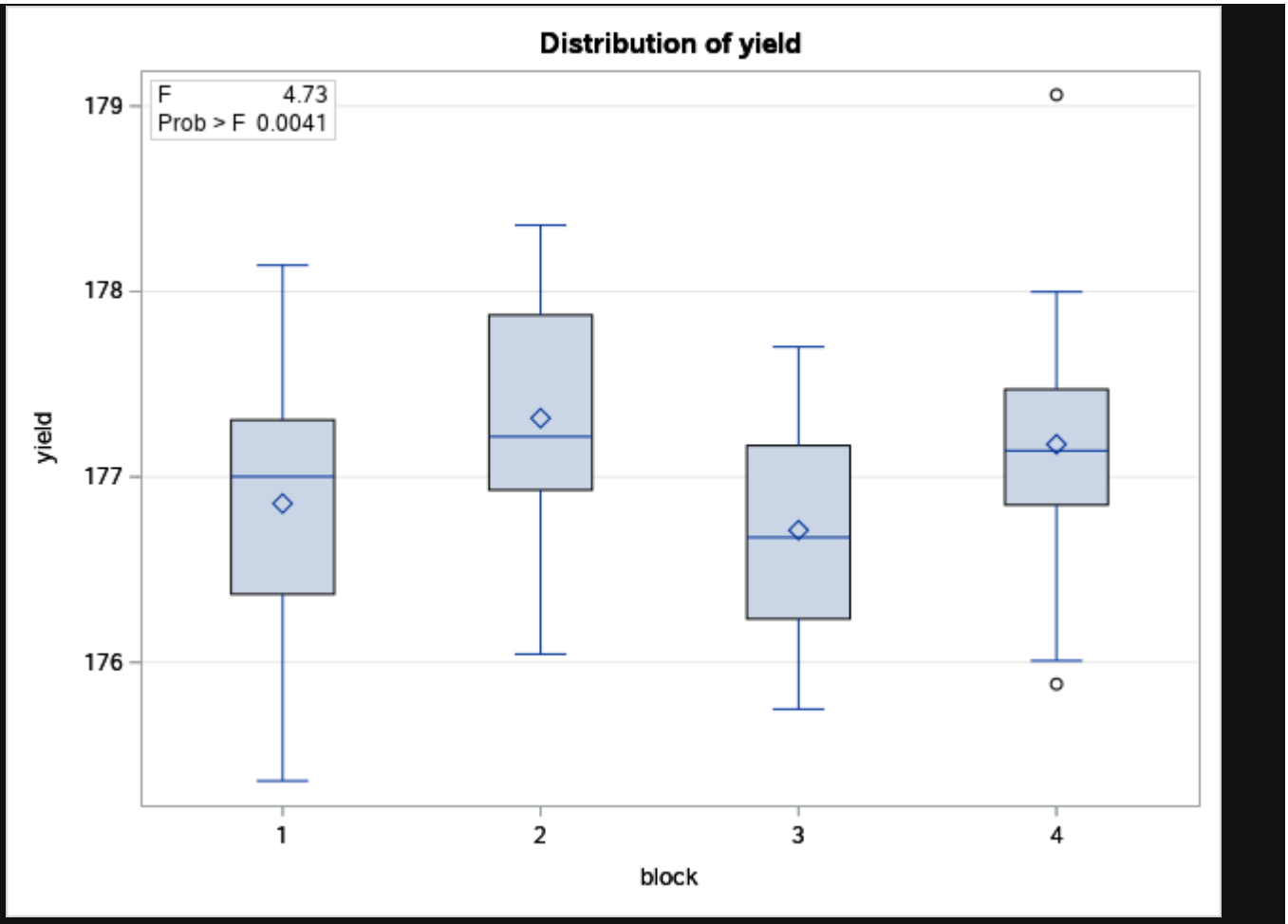
The ANOVA Procedure

Dependent Variable: yield

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	5.60782017	1.86927339	4.73	0.0041
Error	92	36.34641262	0.39506970		
Corrected Total	95	41.95423279			

R-Square	Coeff Var	Root MSE	yield Mean
0.133665	0.355080	0.628546	177.0155

Source	DF	Anova SS	Mean Square	F Value	Pr > F
block	3	5.60782017	1.86927339	4.73	0.0041



The ANOVA Procedure

Class Level Information		
Class	Levels	Values
block	4	1 2 3 4

Number of Observations Read	96
Number of Observations Used	96

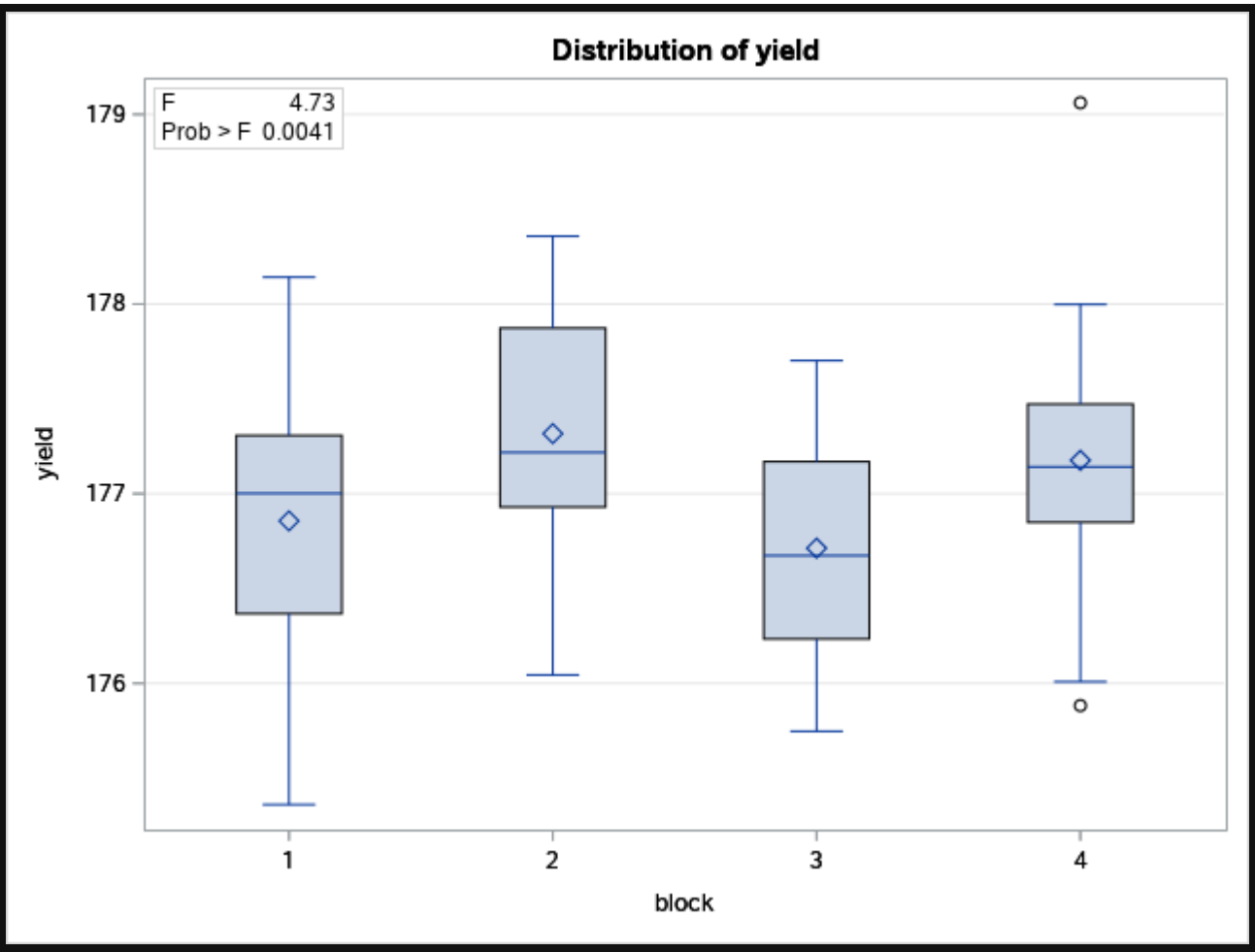
The ANOVA Procedure

Dependent Variable: yield

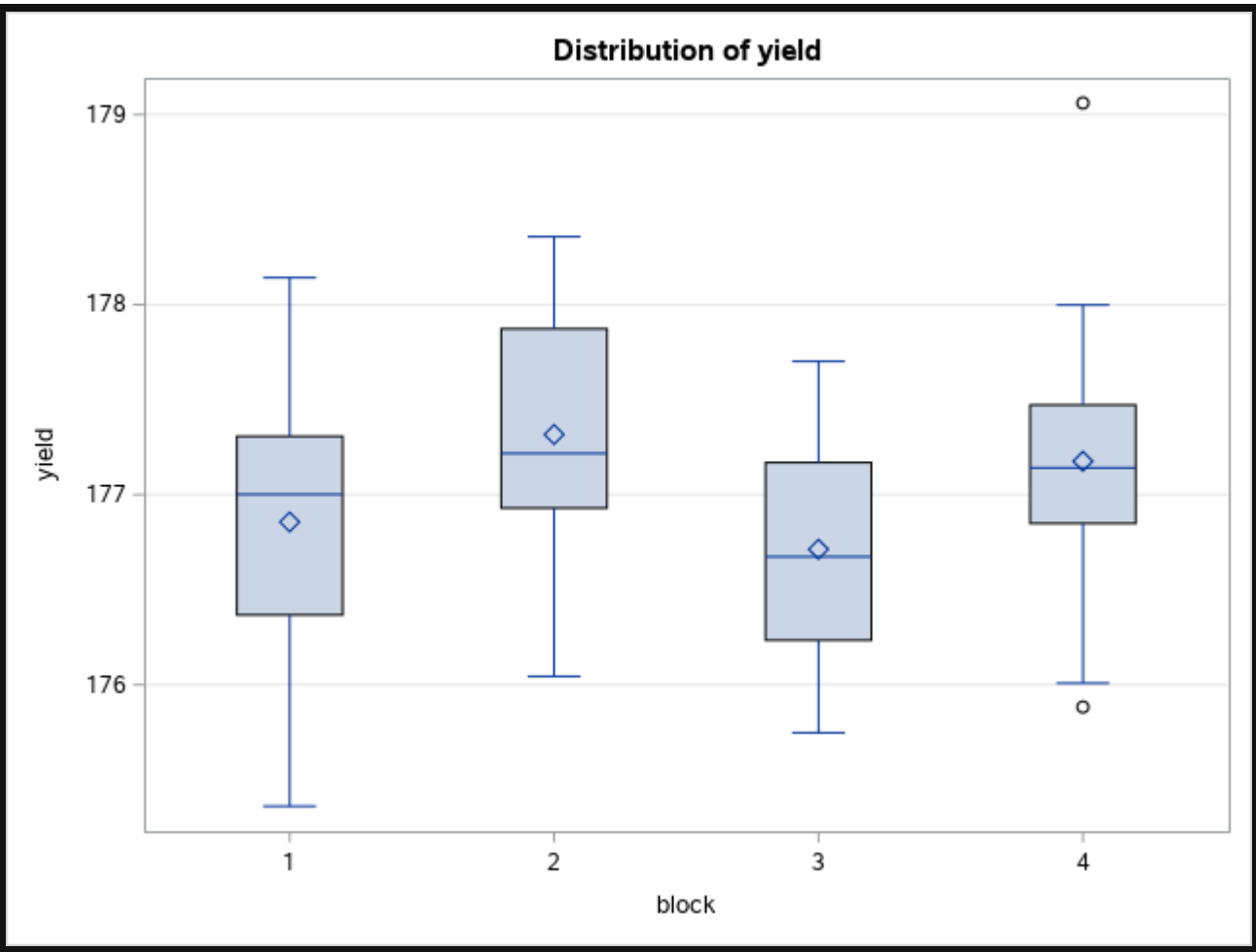
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	3	5.60782017	1.86927339	4.73	0.0041
Error	92	36.34641262	0.39506970		
Corrected Total	95	41.95423279			

R-Square	Coeff Var	Root MSE	yield Mean
0.133665	0.355080	0.628546	177.0155

Source	DF	Anova SS	Mean Square	F Value	Pr > F
block	3	5.60782017	1.86927339	4.73	0.0041



The ANOVA Procedure

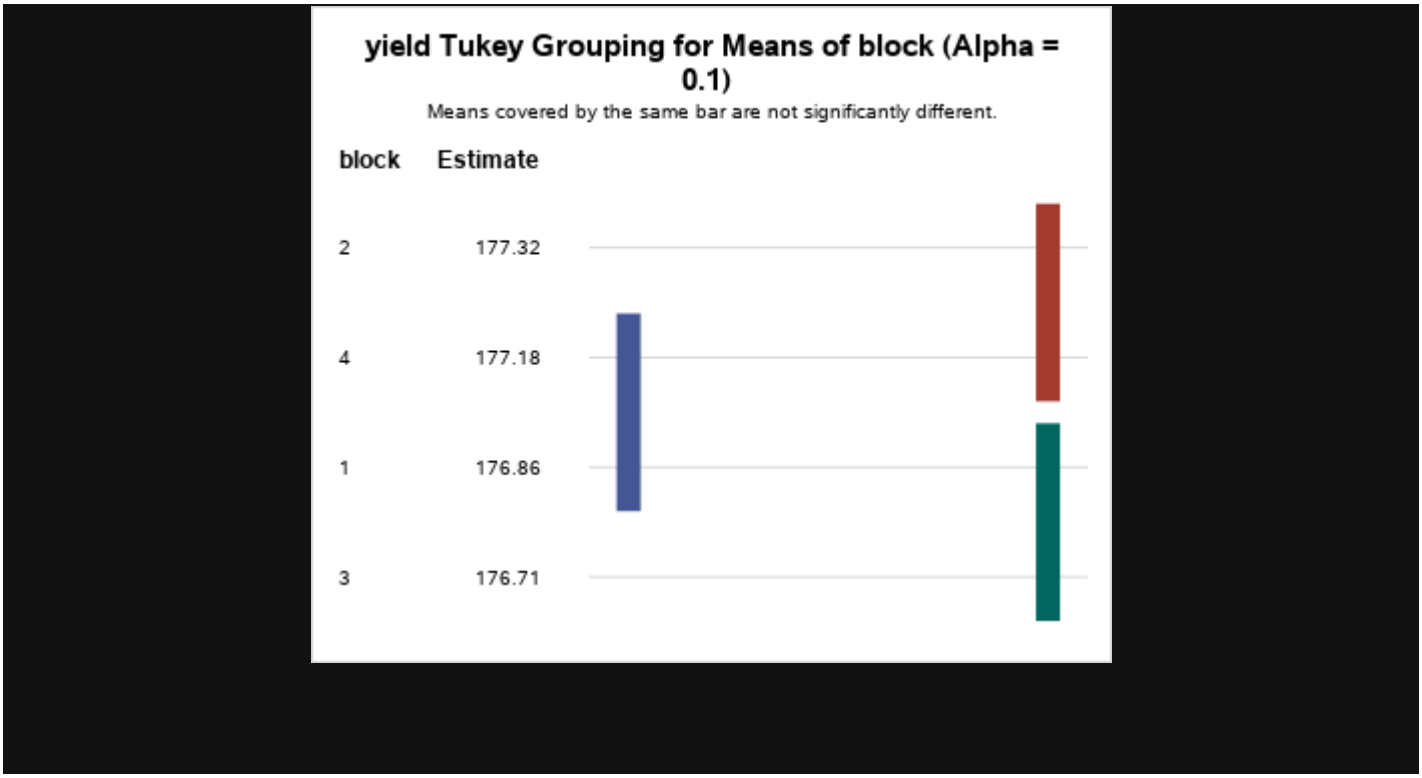


The ANOVA Procedure

Tukey's Studentized Range (HSD) Test for yield

Note: This test controls the Type I experimentwise error rate, but it generally has a higher Type II error rate than REGWQ.

Alpha	0.1
Error Degrees of Freedom	92
Error Mean Square	0.39507
Critical Value of Studentized Range	3.28680
Minimum Significant Difference	0.4217


yield Tukey Grouping for Means of block (Alpha = 0.1)
Means covered by the same bar are not significantly different.
block
Estimate
2
177.32
4
177.18
1
176.86
3
176.71