

The GLM Procedure

Class Level Information		
Class	Levels	Values
species	6	HSprw MPipit PWtail Robin TPipit Wren

Number of Observations Read	90
Number of Observations Used	90

The GLM Procedure

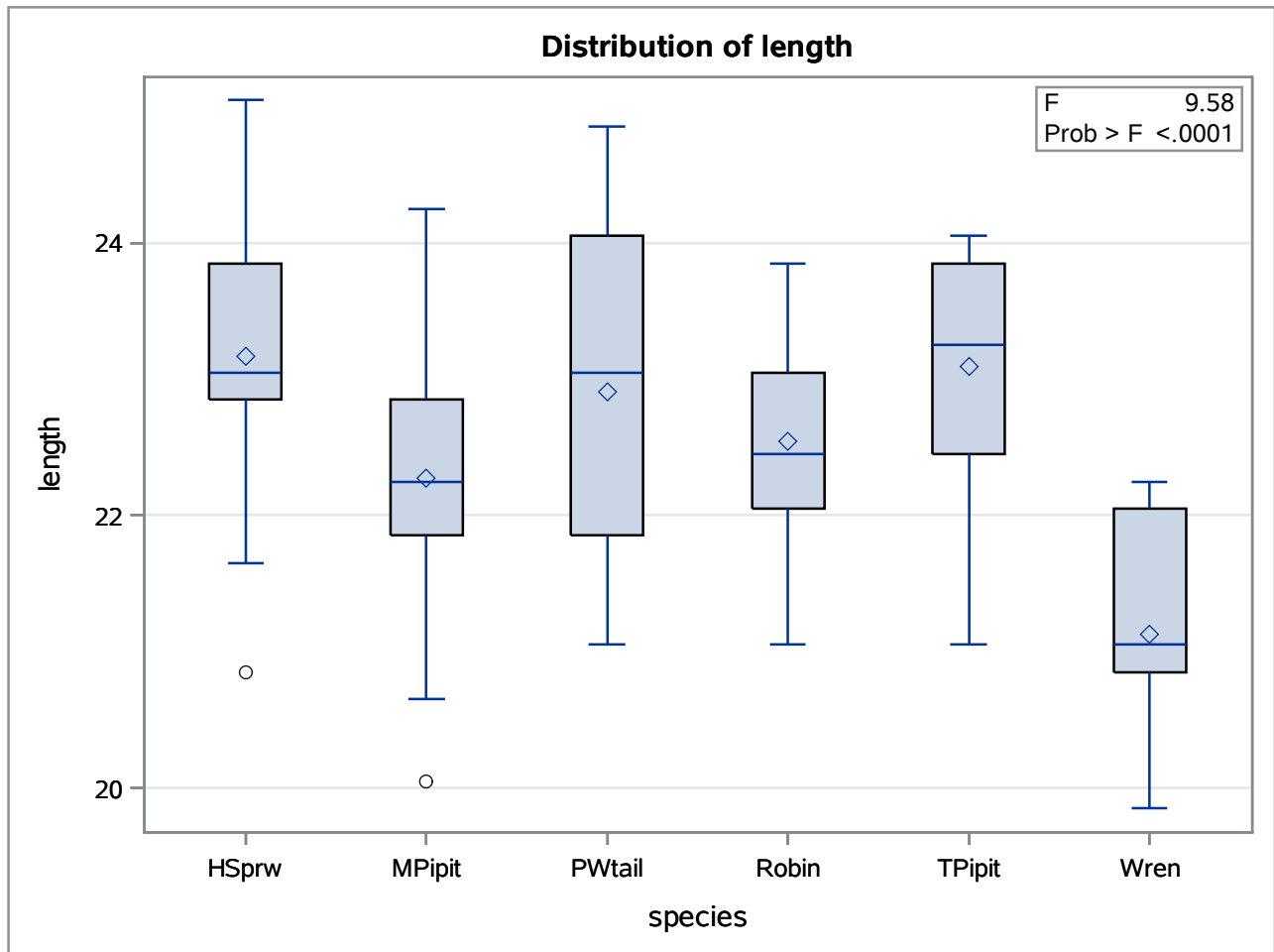
Dependent Variable: length

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	43.2928889	8.6585778	9.58	<.0001
Error	84	75.9200000	0.9038095		
Corrected Total	89	119.2128889			

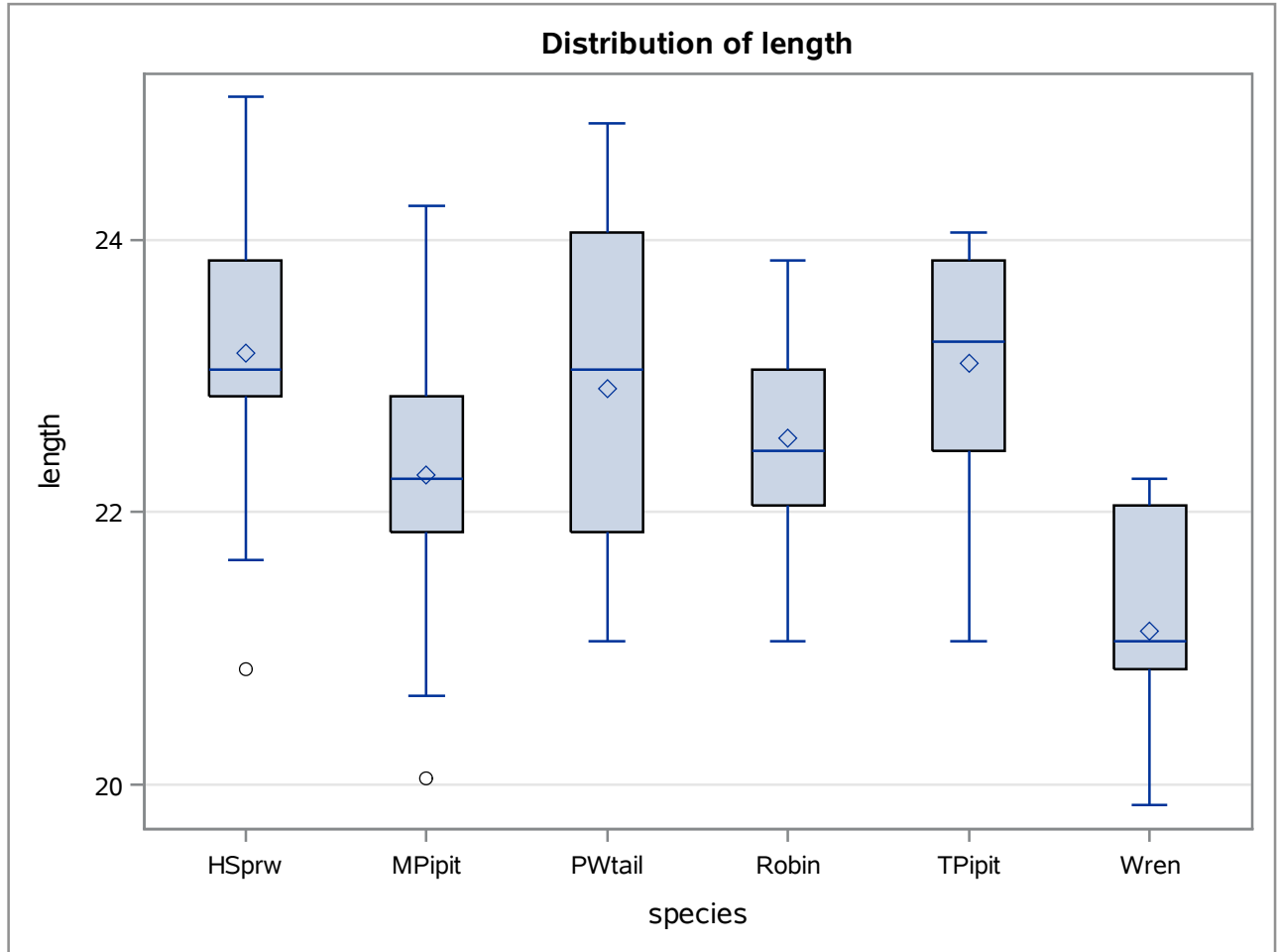
R-Square	Coeff Var	Root MSE	length Mean
0.363156	4.221740	0.950689	22.51889

Source	DF	Type I SS	Mean Square	F Value	Pr > F
species	5	43.2928889	8.65857778	9.58	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
species	5	43.2928889	8.65857778	9.58	<.0001



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t Tests (LSD) for length

Note: This test controls the Type I comparisonwise error rate, not the experimentwise error rate.

Alpha	0.05
Error Degrees of Freedom	84
Error Mean Square	0.90381
Critical Value of t	1.98861
Least Significant Difference	0.6903

Means with the same letter are not significantly different.				
t Grouping		Mean	N	species
	A	23.1700	15	HSprw
	A			
	A	23.0900	15	TPipit
	A			
B	A	22.9033	15	PWtail
B	A			
B	A	22.5433	15	Robin
B				
B		22.2767	15	MPipit
	C	21.1300	15	Wren

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Tukey's Studentized Range (HSD) Test for length

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

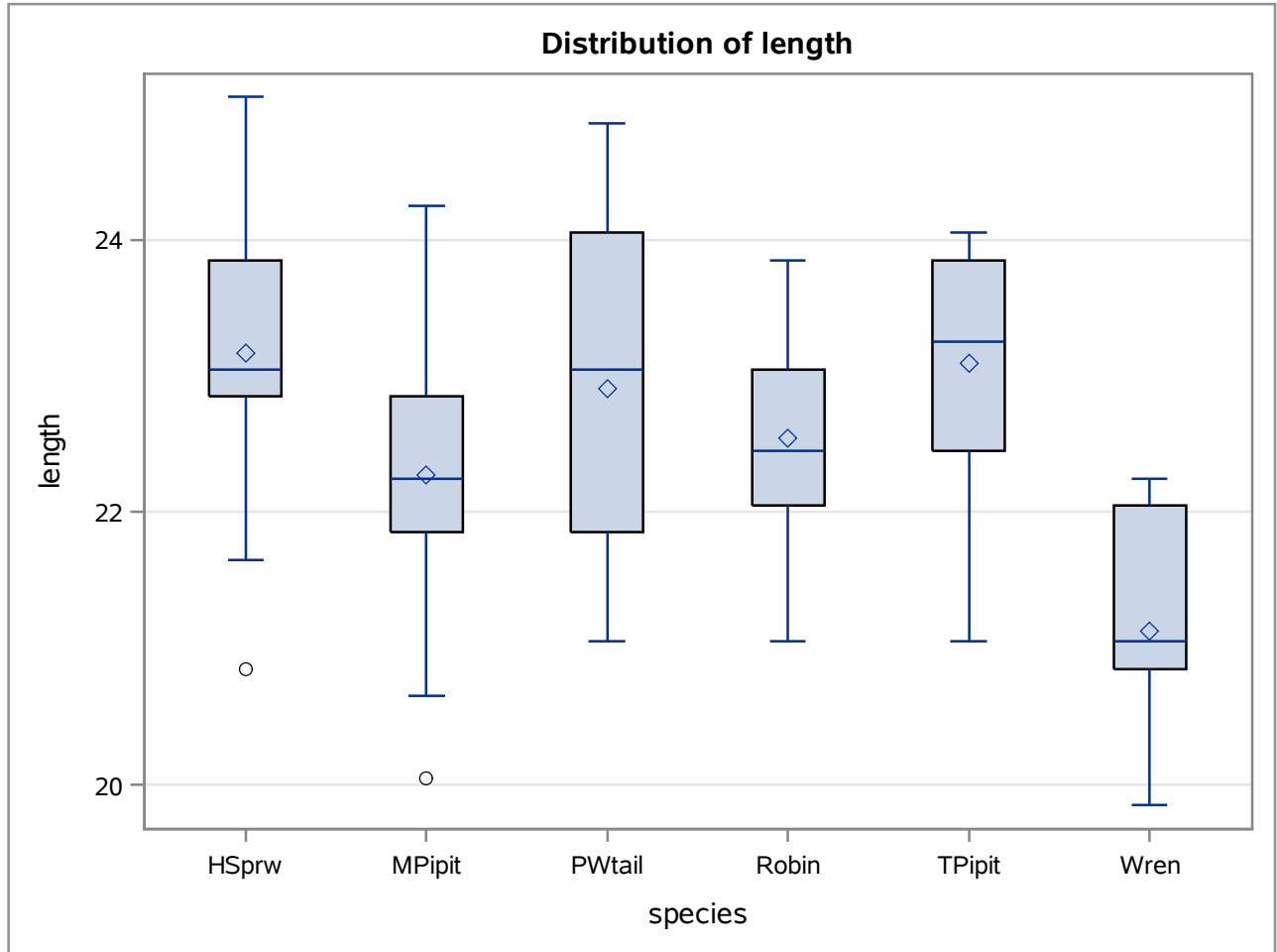
Alpha	0.05
Error Degrees of Freedom	84
Error Mean Square	0.90381
Critical Value of Studentized Range	4.12462
Minimum Significant Difference	1.0125

Means with the same letter are not significantly different.			
Tukey Grouping	Mean	N	species
A	23.1700	15	HSprw
A			
A	23.0900	15	TPipit
A			
A	22.9033	15	PWtail
A			
A	22.5433	15	Robin
A			
A	22.2767	15	MPipit
B	21.1300	15	Wren

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Levene's Test for Homogeneity of length Variance ANOVA of Squared Deviations from Group Means					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
species	5	7.6634	1.5327	1.11	0.3609
Error	84	115.9	1.3796		

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Level of species	N	length	
		Mean	Std Dev
HSprw	15	23.1700000	1.04690019
MPipit	15	22.2766667	1.15601944
PWtail	15	22.9033333	1.06761862
Robin	15	22.5433333	0.69638522
TPipit	15	23.0900000	0.90142744
Wren	15	21.1300000	0.74373574

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Coefficients for Estimate Pipits vs Robins	
	Row 1
Intercept	0
species HSprw	0
species MPipit	1
species PWtail	0
species Robin	-2
species TPipit	1
species Wren	0

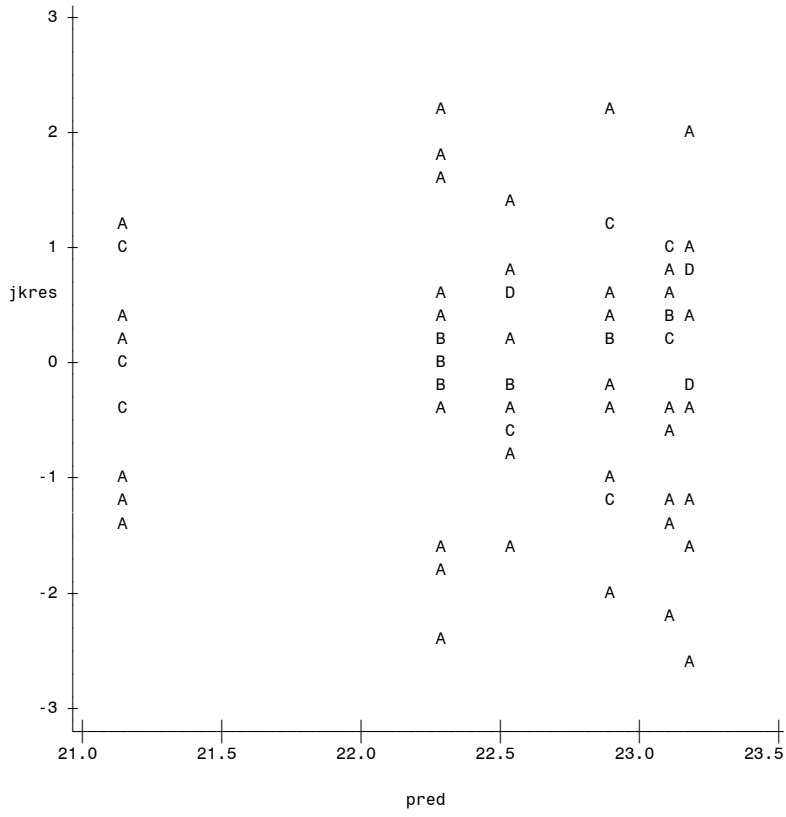
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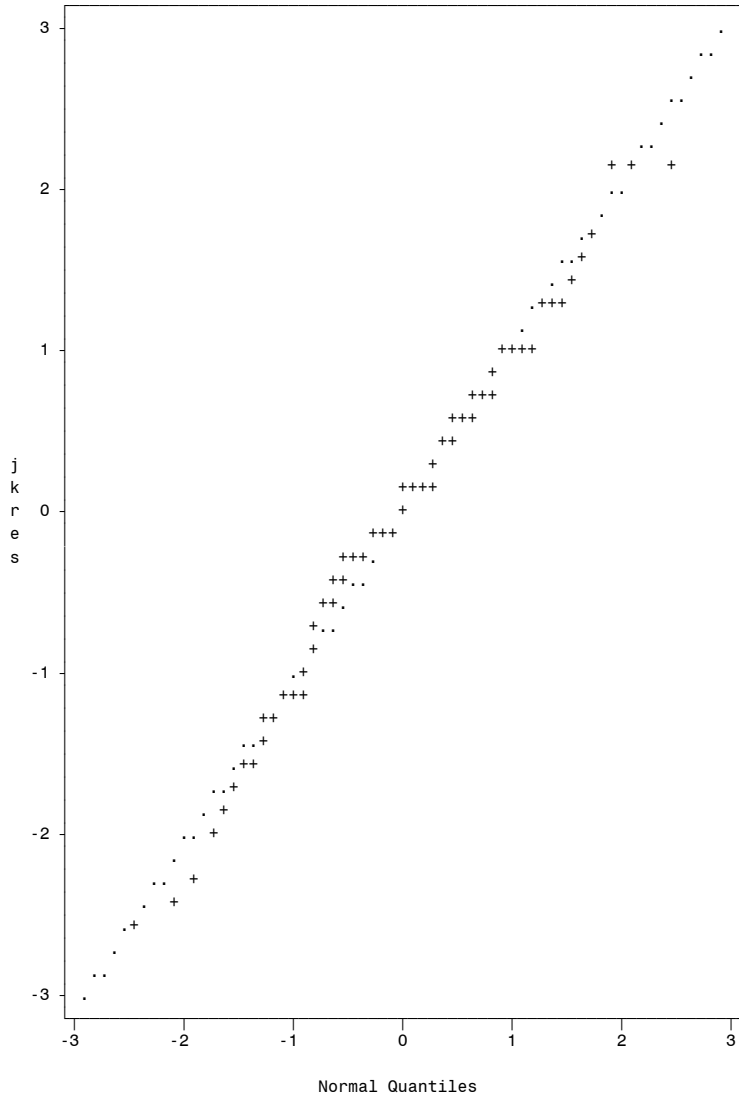
Dependent Variable: length

Contrast	DF	Contrast SS	Mean Square	F Value	Pr > F
Pipits vs Robins	1	0.19600000	0.19600000	0.22	0.6426

Parameter	Estimate	Standard Error	t Value	Pr > t
Pipits vs Robins	0.28000000	0.60126850	0.47	0.6426

Plot of jkres*pred. Legend: A = 1 obs, B = 2 obs, etc.





Normal Line: ... Mu=-0.002, Sigma=1.0178
Observations: + (35 Hidden)