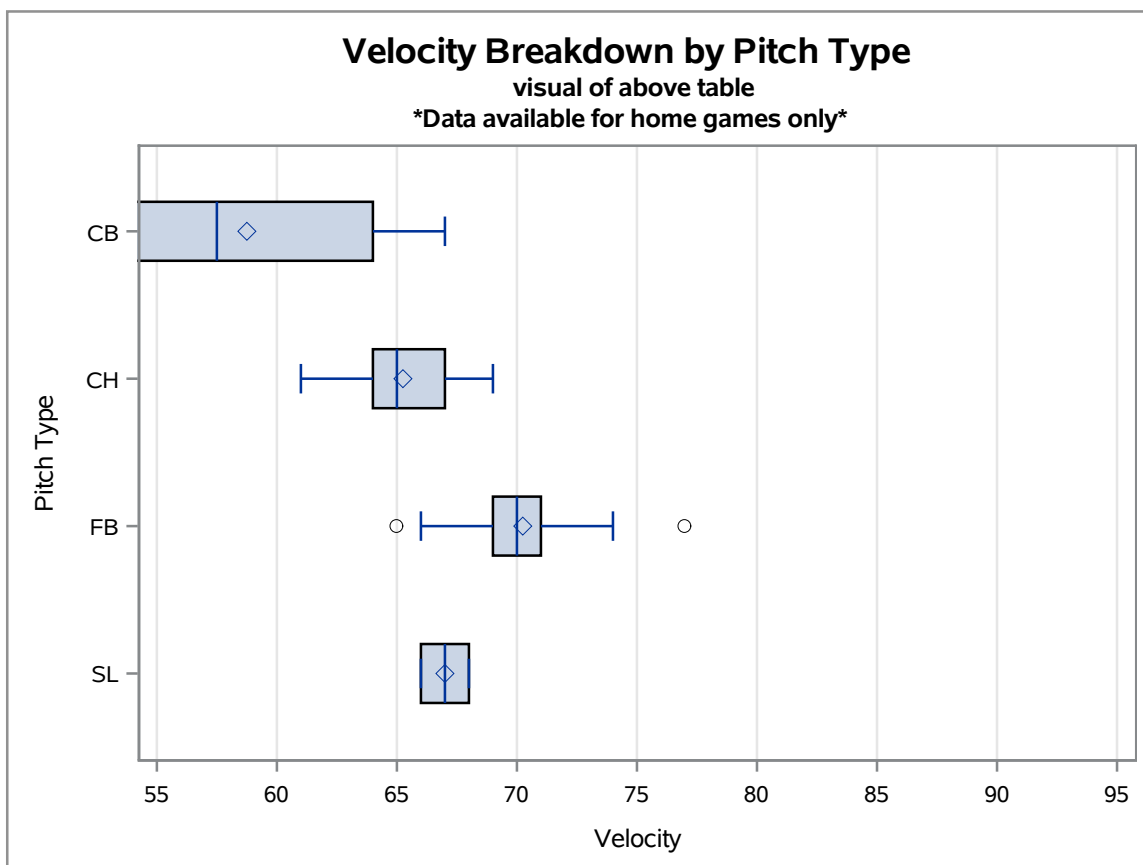


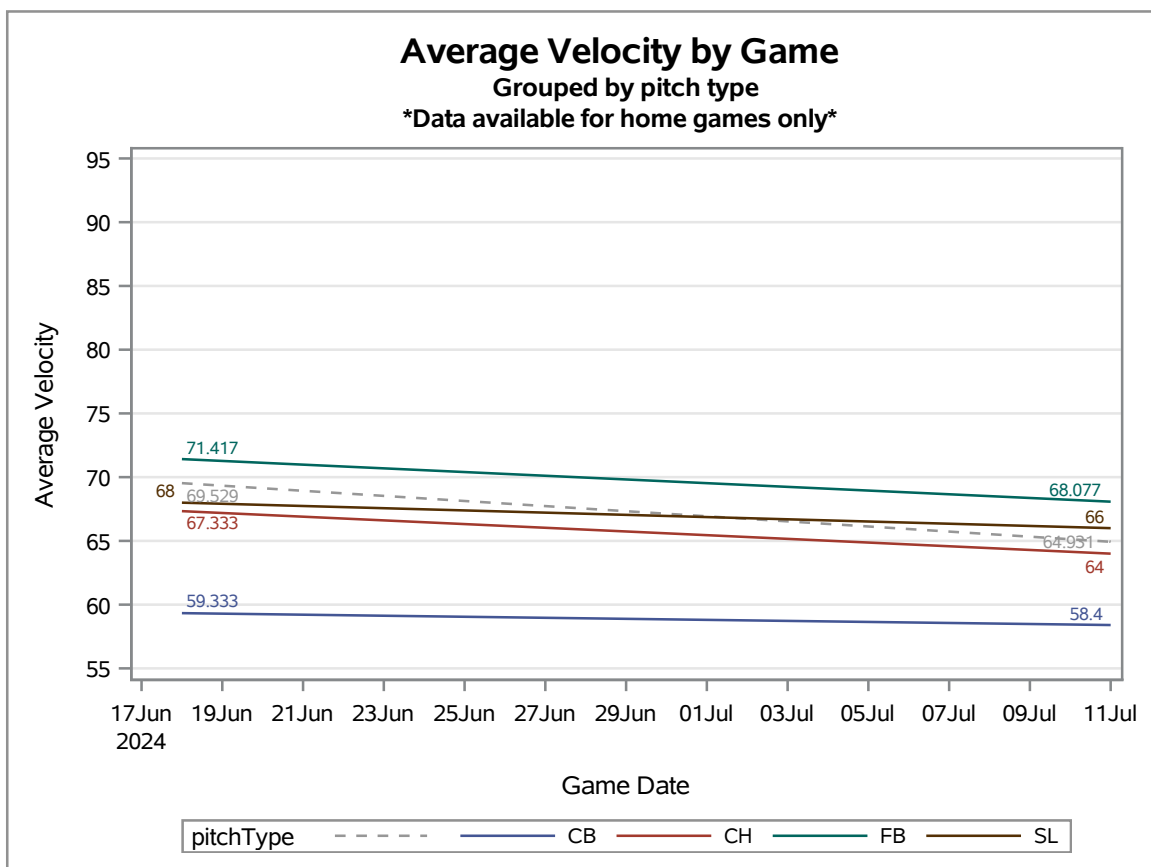
Velocity Breakdown by Pitch Type

Data available for home games only

1

Analysis Variable : velocity					
pitchType	N Obs	N	Minimum	Mean	Maximum
CB	8	8	53.0	58.8	67.0
CH	16	16	61.0	65.3	69.0
FB	37	37	65.0	70.2	77.0
SL	2	2	66.0	67.0	68.0





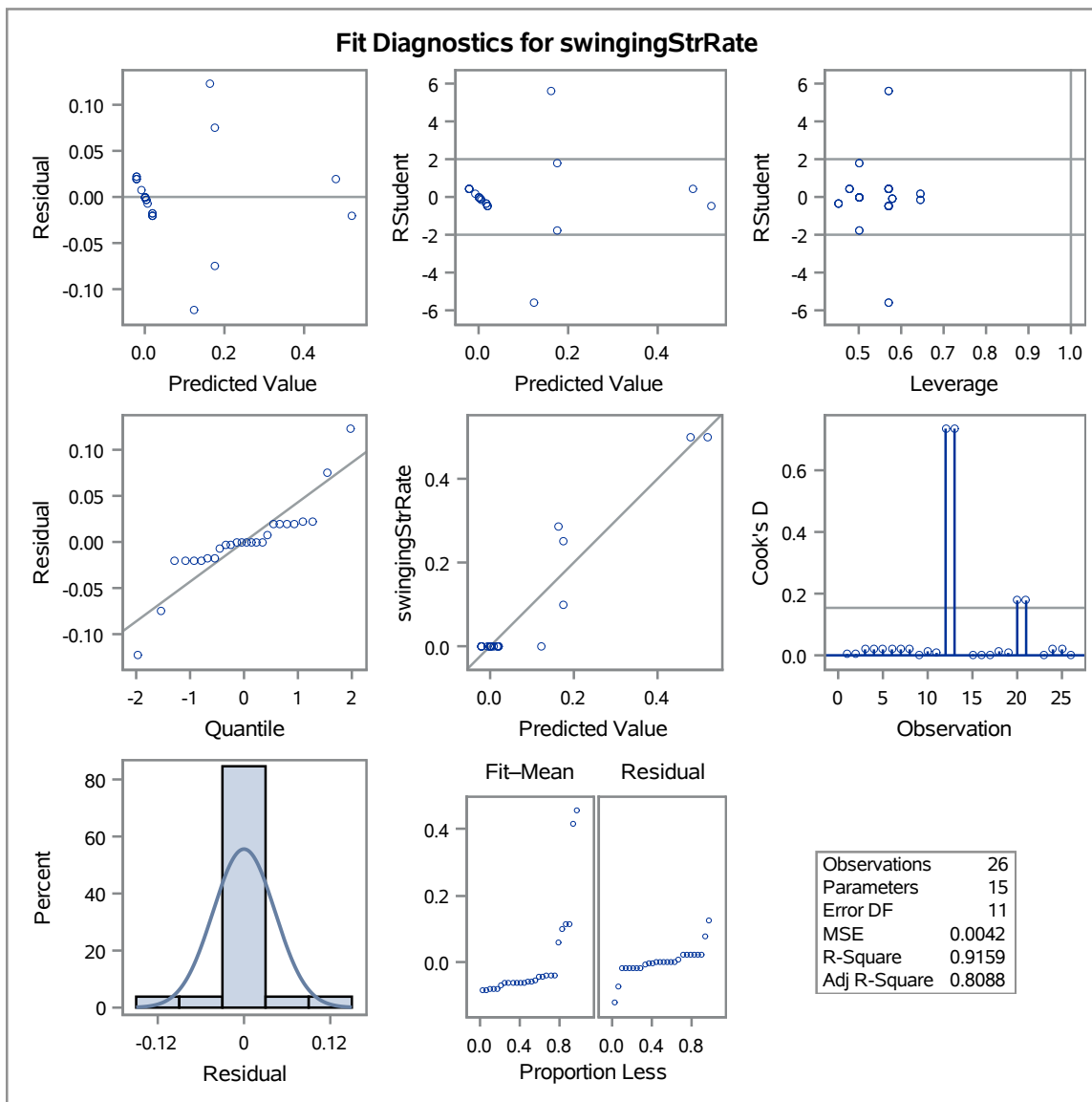
Dependent Variable: swingingStrRate

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	14	0.50484341	0.03606024	8.55	0.0005
Error	11	0.04638304	0.00421664		
Corrected Total	25	0.55122645			

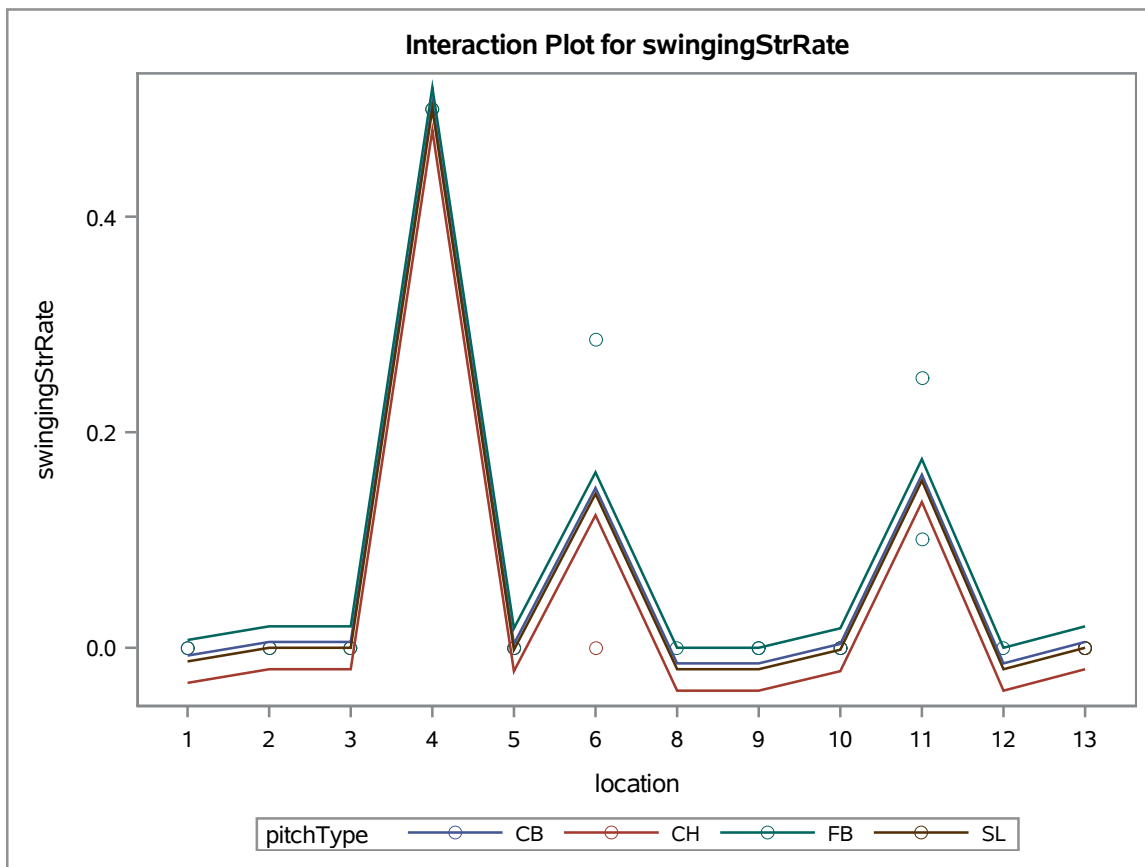
R-Square	Coeff Var	Root MSE	swingingStrRate Mean
0.915855	103.2165	0.064936	0.062912

Source	DF	Type III SS	Mean Square	F Value	Pr > F
location	11	0.47990340	0.04362758	10.35	0.0003
pitchType	3	0.00568329	0.00189443	0.45	0.7228

Dependent Variable: swingingStrRate



Dependent Variable: swingingStrRate



Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

pitchType	swingingStrRate LSMEAN	LSMEAN Number
CB	0.06559298	1
CH	0.04027652	2
FB	0.08005952	3
SL	0.06016802	4

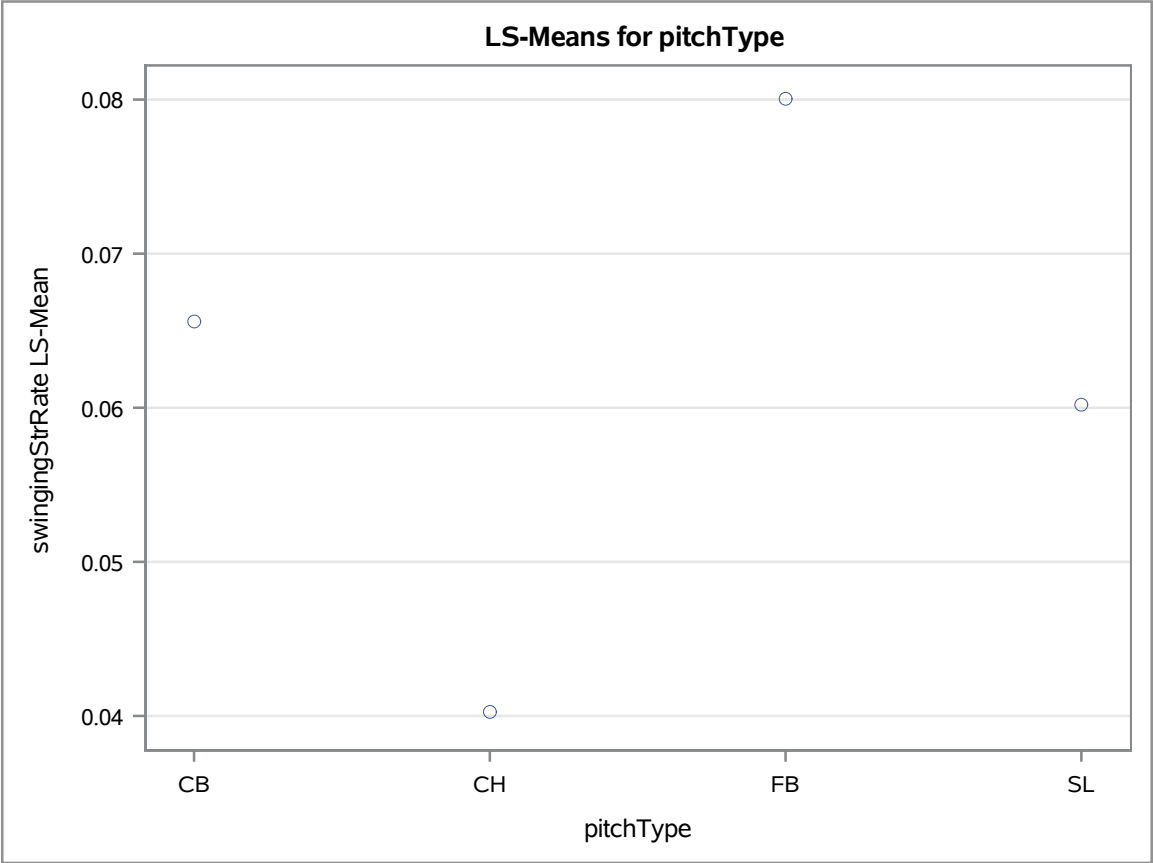
Least Squares Means for effect pitchType Pr > t for H0: LSMean(i)=LSMean(j) Dependent Variable: swingingStrRate				
i/j	1	2	3	4
1		0.9618	0.9908	0.9999
2	0.9618		0.6619	0.9905
3	0.9908	0.6619		0.9905
4	0.9999	0.9905	0.9905	

pitchType	swingingStrRate LSMEAN	95% Confidence Limits	
CB	0.065593	-0.034657	0.165843
CH	0.040277	-0.021727	0.102280
FB	0.080060	0.040558	0.119561
SL	0.060168	-0.081270	0.201607

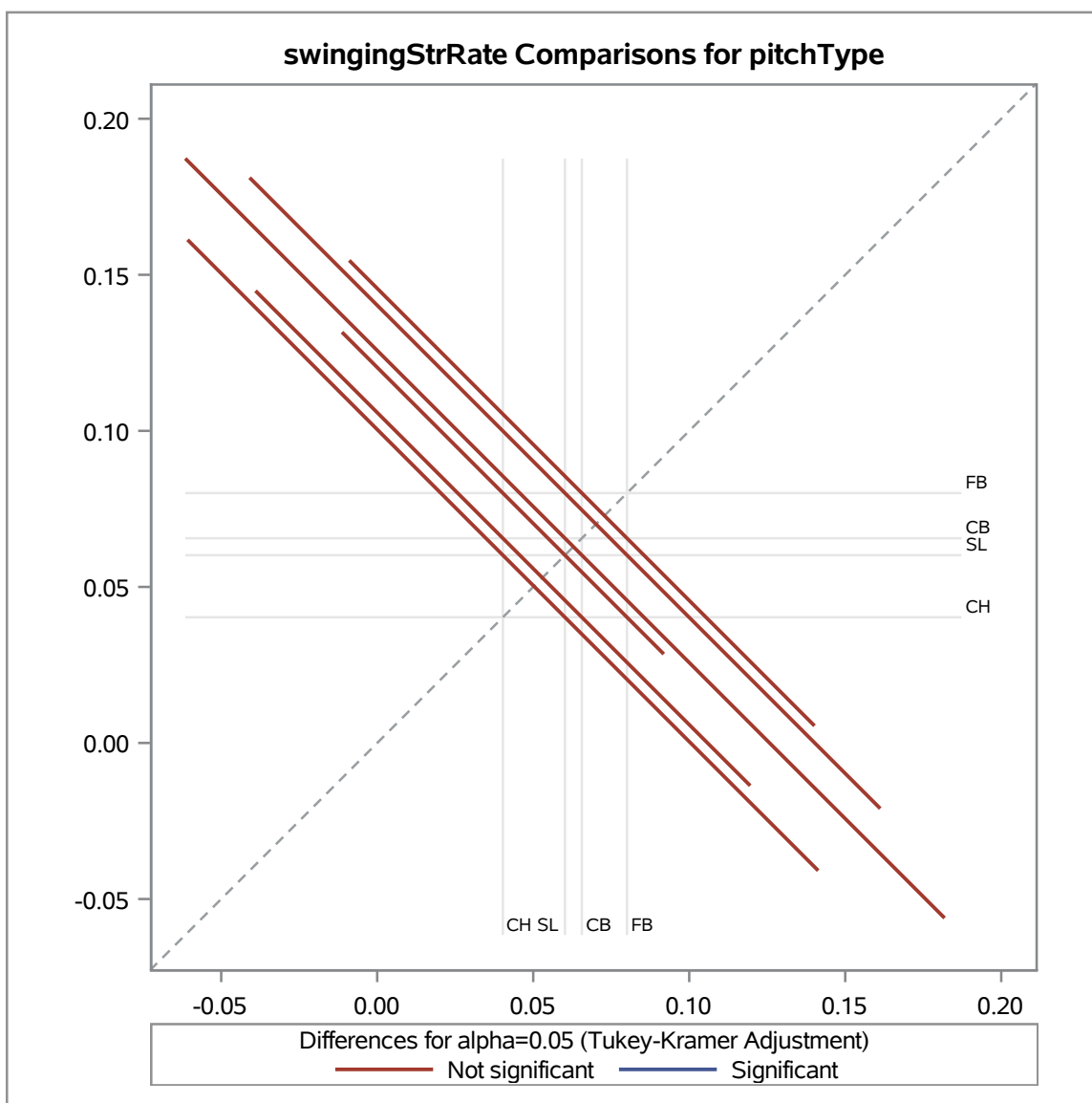
Least Squares Means for Effect pitchType				
i	j	Difference Between Means	Simultaneous 95% Confidence Limits for LSMean(i)-LSMean(j)	
1	2	0.025316	-0.133232	0.183865
1	3	-0.014467	-0.163587	0.134654
1	4	0.005425	-0.237923	0.248773
2	3	-0.039783	-0.142910	0.063344

Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

Least Squares Means for Effect pitchType				
i	j	Difference Between Means	Simultaneous 95% Confidence Limits for LSMean(i)-LSMean(j)	
2	4	-0.019892	-0.222001	0.182218
3	4	0.019892	-0.182218	0.222001



Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer



Swinging Strike Rate by Zone

Zones 1-9 are inside strikezone, 10-13 are outside of zone

10

Pitch Location	Total Pitches	Total Swings	Total Misses	Swinging Strike Rate
1	3	3	0	0.00%
2	6	5	0	0.00%
3	3	2	0	0.00%
4	4	4	2	50.00%
5	5	4	0	0.00%
6	8	4	2	25.00%
8	1	0	0	0.00%
9	3	1	0	0.00%
10	10	0	0	0.00%
11	14	2	1	7.14%
12	1	0	0	0.00%
13	12	1	0	0.00%

Swing and Miss Data by Pitch Type

Pitch Type	Total Pitches	Total Swings	Total Misses	Swinging Strike Rate
CB	8	4	0	0.00%
CH	18	6	1	5.56%
FB	41	15	4	9.76%
SL	3	1	0	0.00%

Regression Analysis of Velocity by Pitch Type

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Dependent Variable: velocity

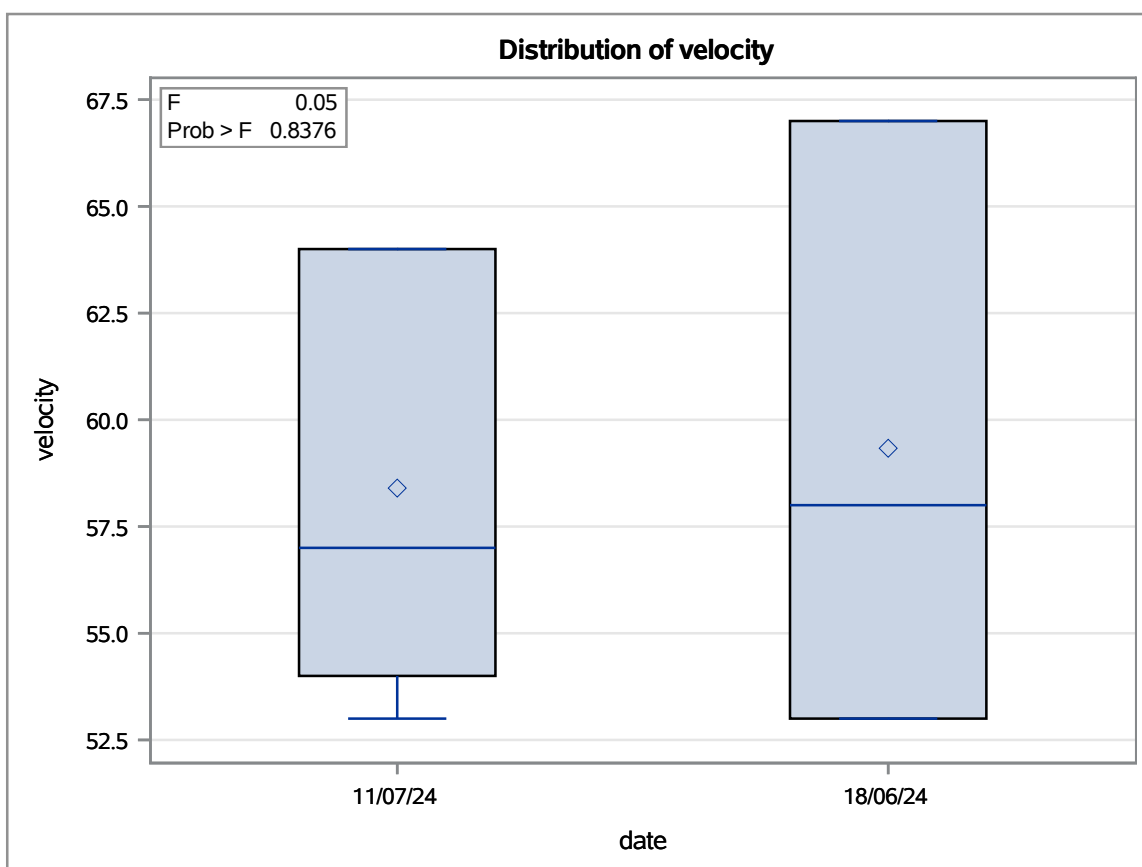
pitchType=CB

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	1.6333333	1.6333333	0.05	0.8376
Error	6	213.8666667	35.6444444		
Corrected Total	7	215.5000000			

R-Square	Coeff Var	Root MSE	velocity Mean
0.007579	10.16221	5.970297	58.75000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
date	1	1.6333333	1.6333333	0.05	0.8376

Source	DF	Type III SS	Mean Square	F Value	Pr > F
date	1	1.6333333	1.6333333	0.05	0.8376



Regression Analysis of Velocity by Pitch Type

13

Data available for home games only

Dependent Variable: velocity

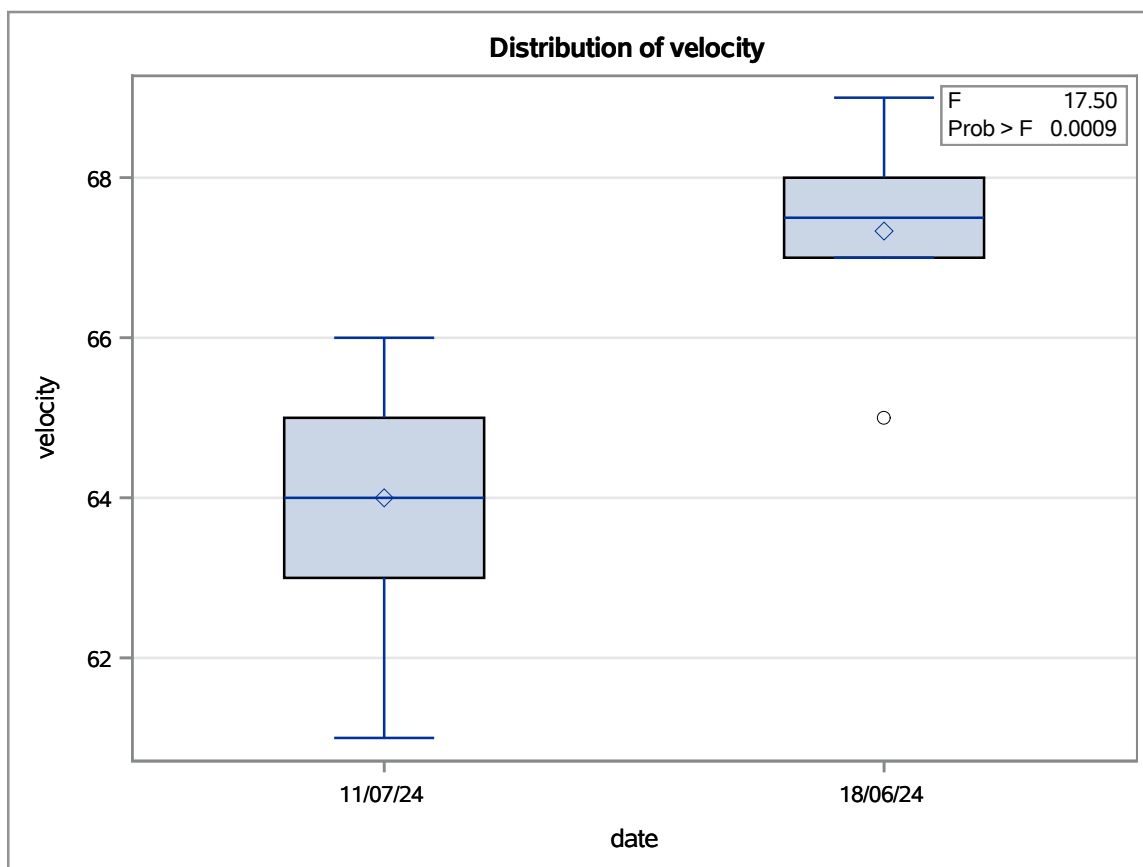
pitchType=CH

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	41.66666667	41.66666667	17.50	0.0009
Error	14	33.33333333	2.38095238		
Corrected Total	15	75.00000000			

R-Square	Coeff Var	Root MSE	velocity Mean
0.555556	2.364802	1.543033	65.25000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
date	1	41.66666667	41.66666667	17.50	0.0009

Source	DF	Type III SS	Mean Square	F Value	Pr > F
date	1	41.66666667	41.66666667	17.50	0.0009



Regression Analysis of Velocity by Pitch Type

Data available for home games only

14

Dependent Variable: velocity

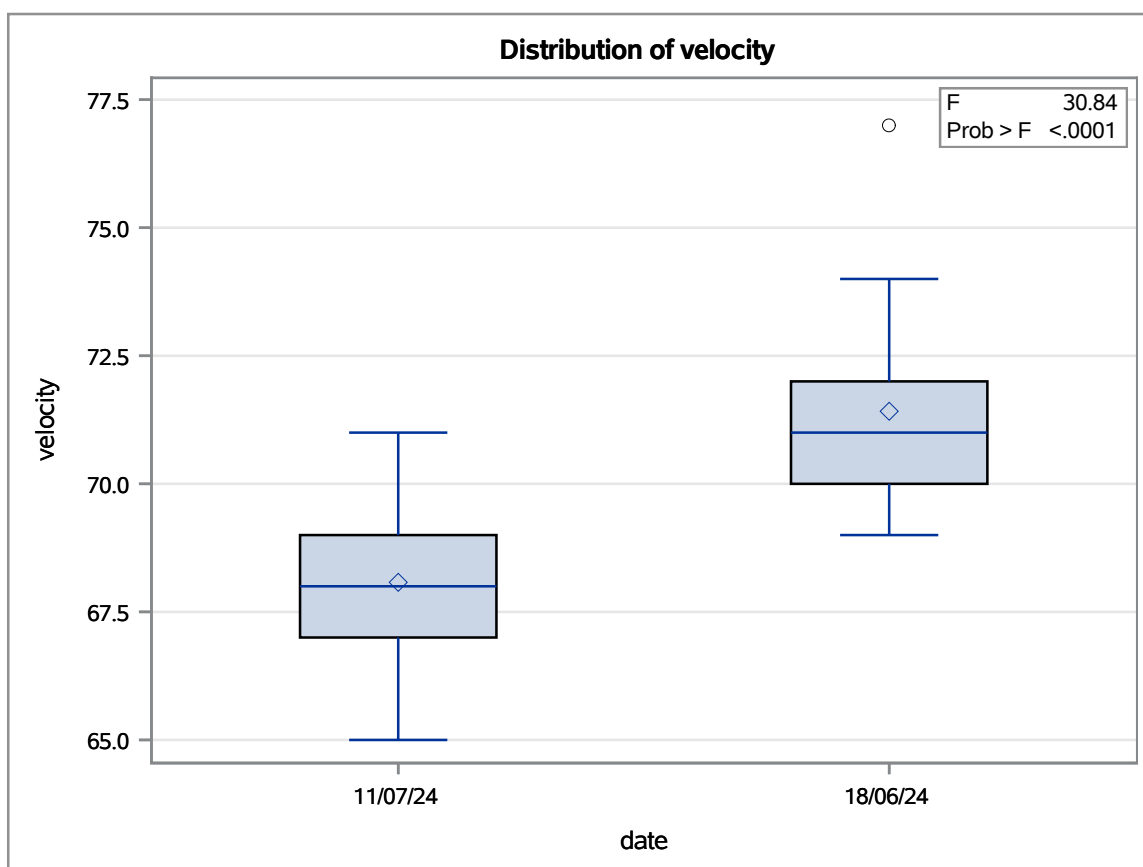
pitchType=FB

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	94.0544006	94.0544006	30.84	<.0001
Error	35	106.7564103	3.0501832		
Corrected Total	36	200.8108108			

R-Square	Coeff Var	Root MSE	velocity Mean
0.468373	2.486328	1.746477	70.24324

Source	DF	Type I SS	Mean Square	F Value	Pr > F
date	1	94.05440055	94.05440055	30.84	<.0001

Source	DF	Type III SS	Mean Square	F Value	Pr > F
date	1	94.05440055	94.05440055	30.84	<.0001



Data available for home games only

Dependent Variable: velocity

pitchType=SL

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	2.00000000	2.00000000	.	.
Error	0	0.00000000	.		
Corrected Total	1	2.00000000			

R-Square	Coeff Var	Root MSE	velocity Mean
1.000000	.	.	67.00000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
date	1	2.00000000	2.00000000	.	.

Source	DF	Type III SS	Mean Square	F Value	Pr > F
date	1	2.00000000	2.00000000	.	.

