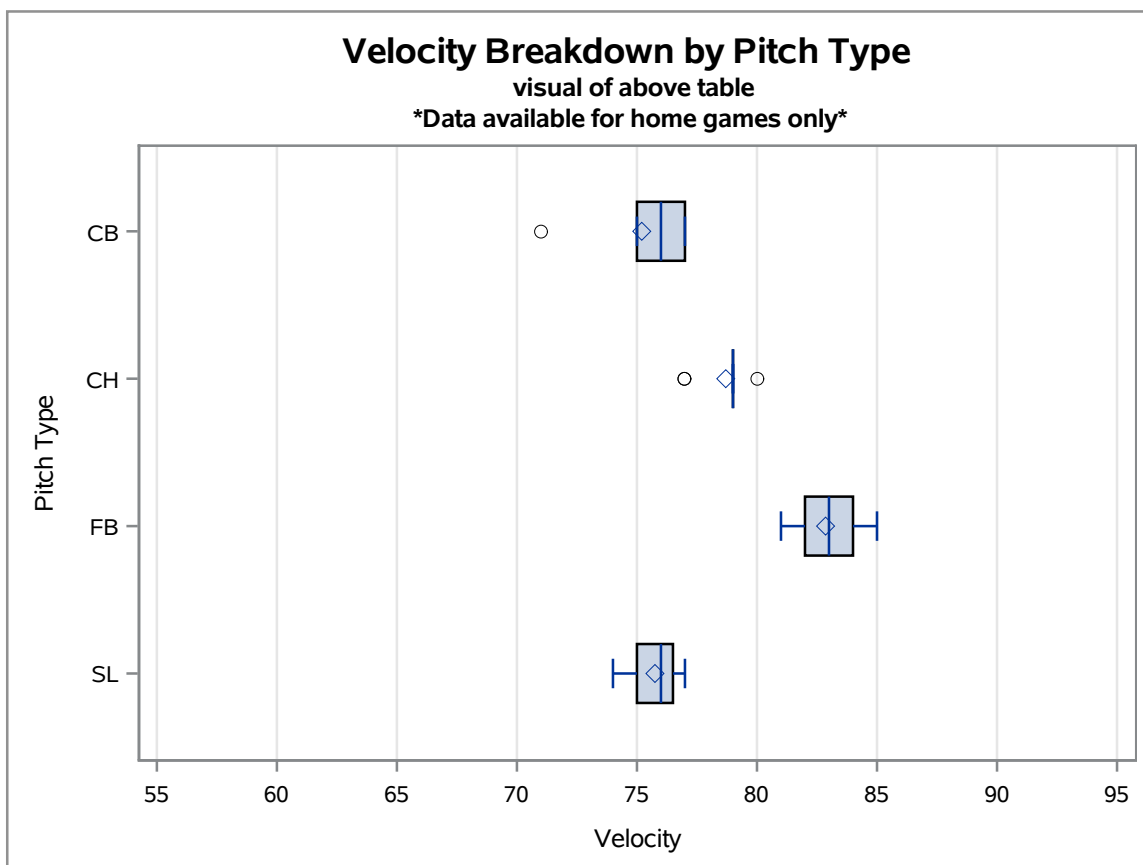


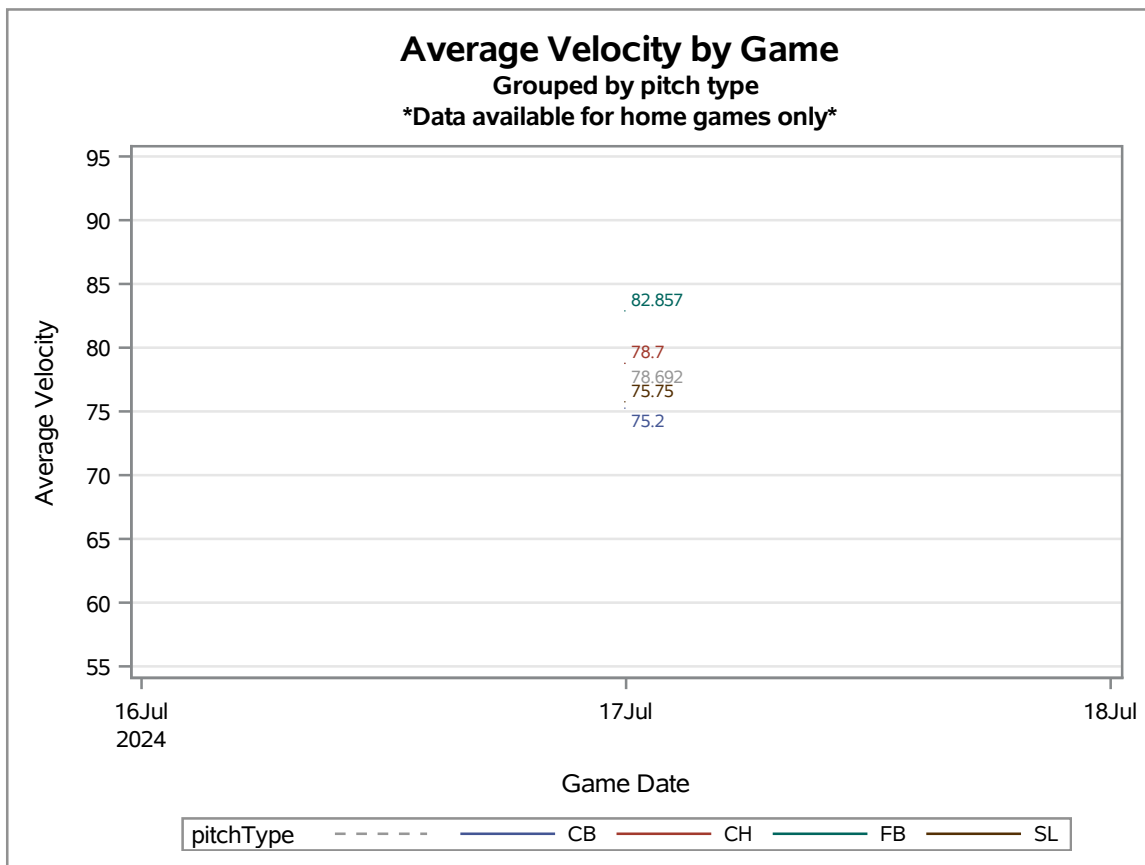
Velocity Breakdown by Pitch Type

Data available for home games only

1

Analysis Variable : velocity					
pitchType	N Obs	N	Minimum	Mean	Maximum
CB	5	5	71.0	75.2	77.0
CH	10	10	77.0	78.7	80.0
FB	7	7	81.0	82.9	85.0
SL	4	4	74.0	75.8	77.0





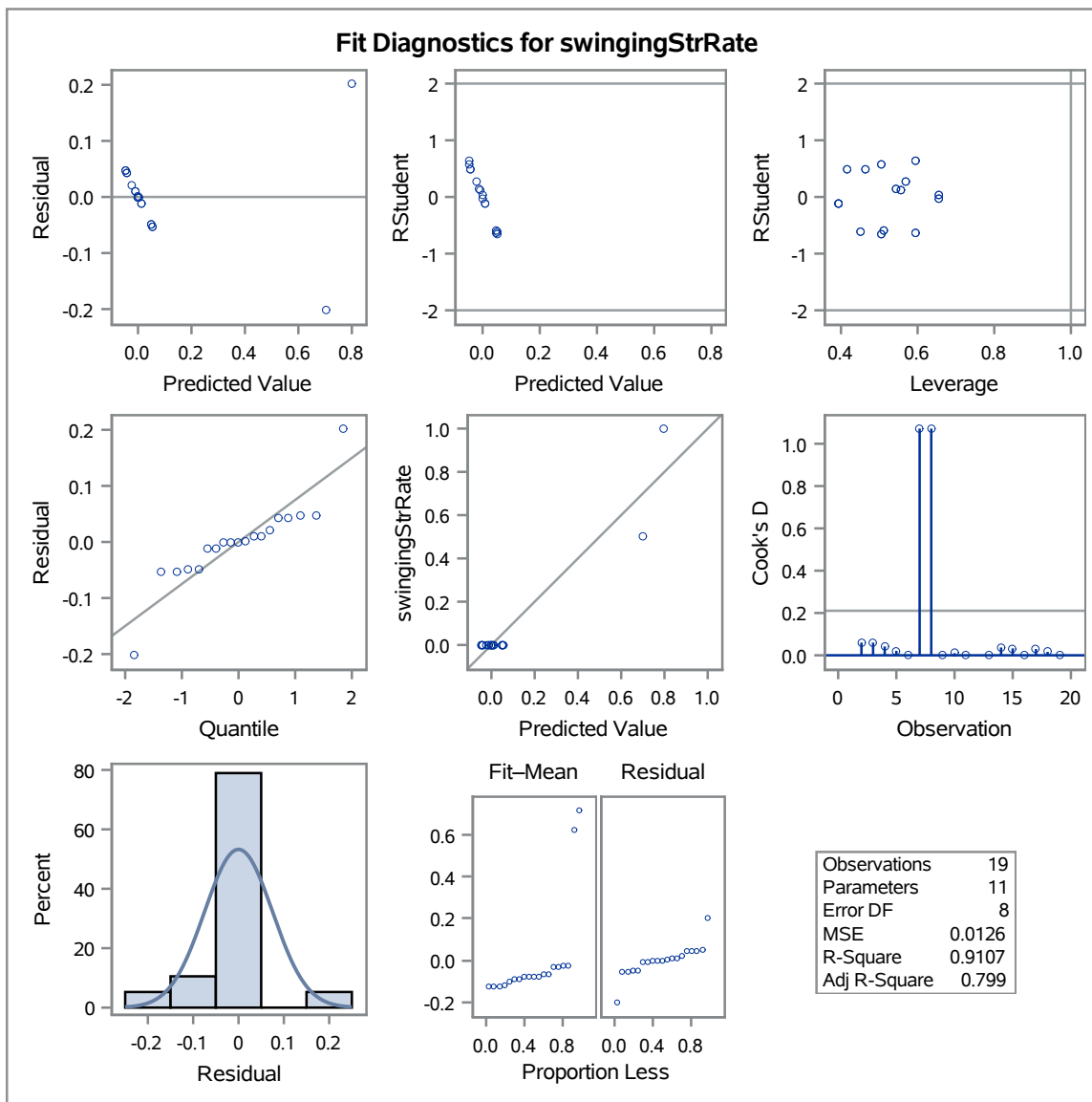
Dependent Variable: swingingStrRate

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	10	1.03050533	0.10305053	8.16	0.0033
Error	8	0.10107362	0.01263420		
Corrected Total	18	1.13157895			

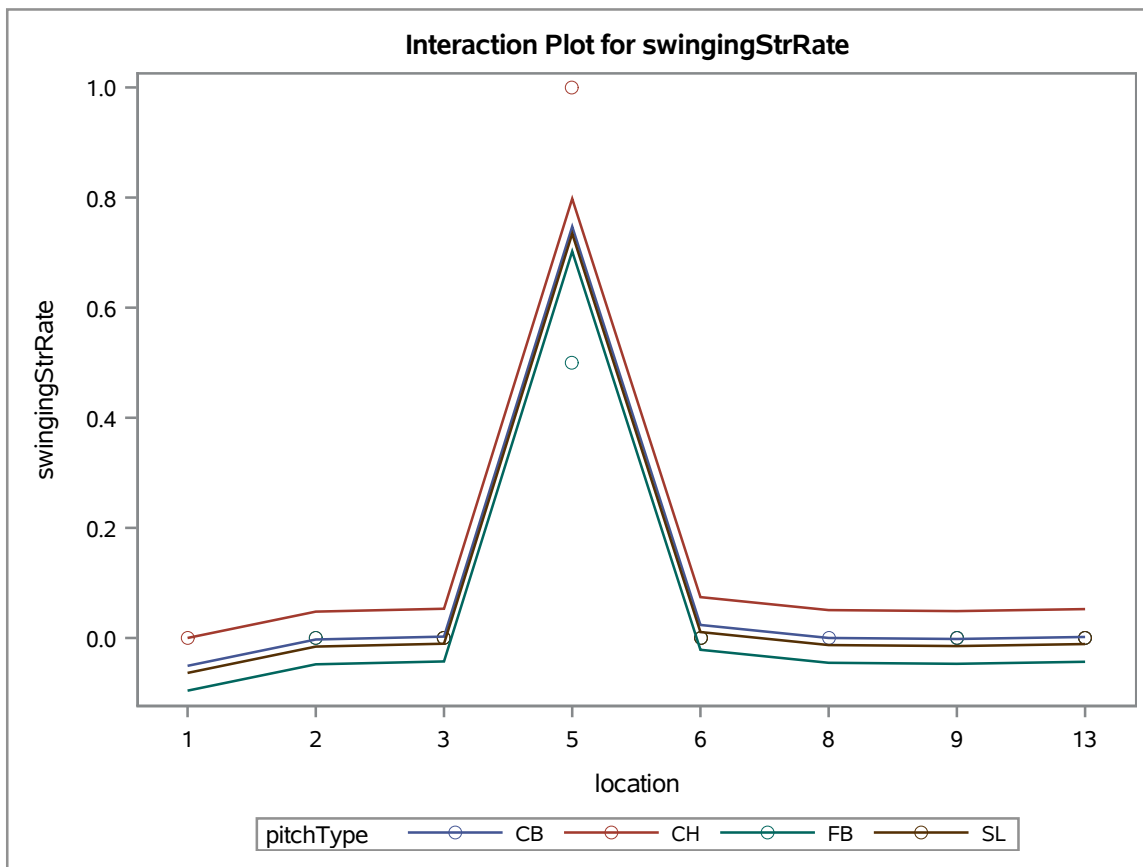
R-Square	Coeff Var	Root MSE	swingingStrRate Mean
0.910679	142.3758	0.112402	0.078947

Source	DF	Type III SS	Mean Square	F Value	Pr > F
location	7	0.94059305	0.13437044	10.64	0.0017
pitchType	3	0.02392638	0.00797546	0.63	0.6152

Dependent Variable: swingingStrRate



Dependent Variable: swingingStrRate



Least Squares Means
Adjustment for Multiple Comparisons: Tukey-Kramer

pitchType	swingingStrRate LSMEAN	LSMEAN Number
CB	0.08999233	1
CH	0.14060583	2
FB	0.04490031	3
SL	0.07710890	4

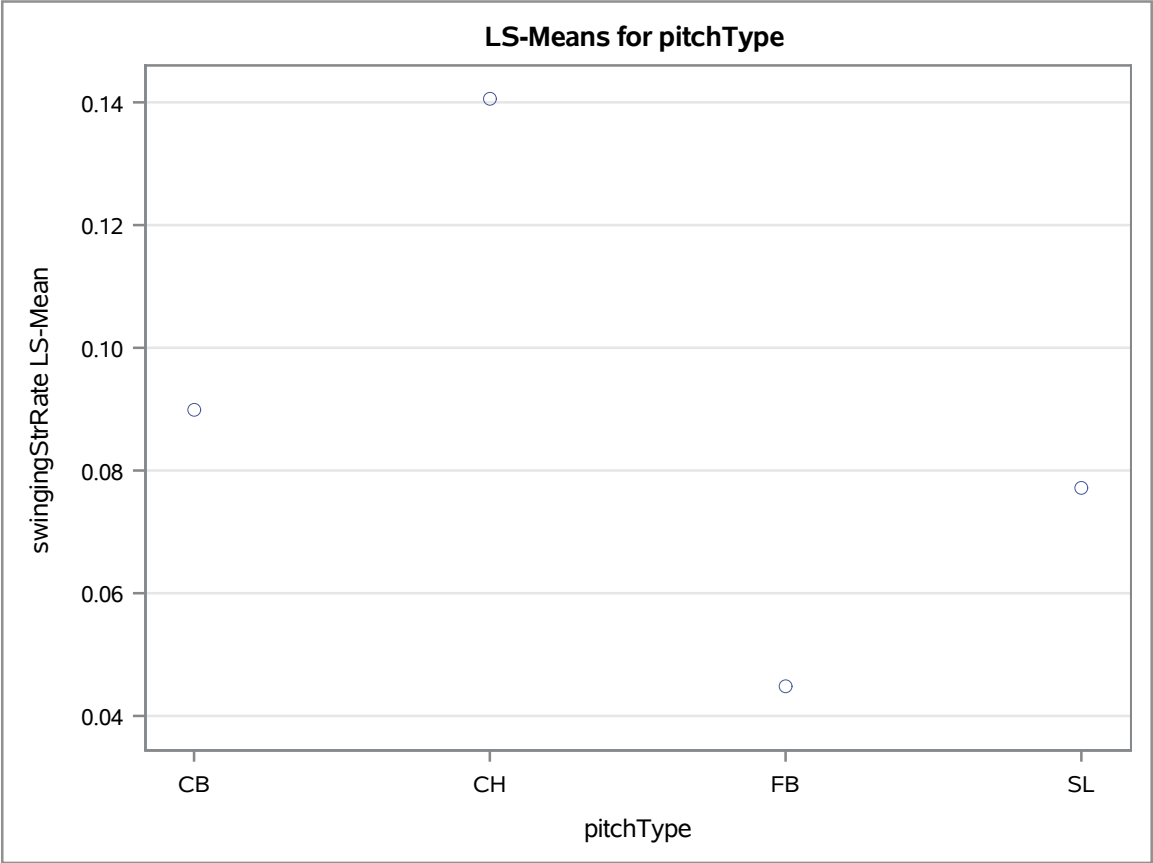
Least Squares Means for effect pitchType Pr > t for H0: LSMean(i)=LSMean(j) Dependent Variable: swingingStrRate				
i/j	1	2	3	4
1		0.9580	0.9684	0.9995
2	0.9580		0.5458	0.8958
3	0.9684	0.5458		0.9781
4	0.9995	0.8958	0.9781	

pitchType	swingingStrRate LSMEAN	95% Confidence Limits	
CB	0.089992	-0.097139	0.277123
CH	0.140606	0.023610	0.257602
FB	0.044900	-0.074364	0.164164
SL	0.077109	-0.092154	0.246372

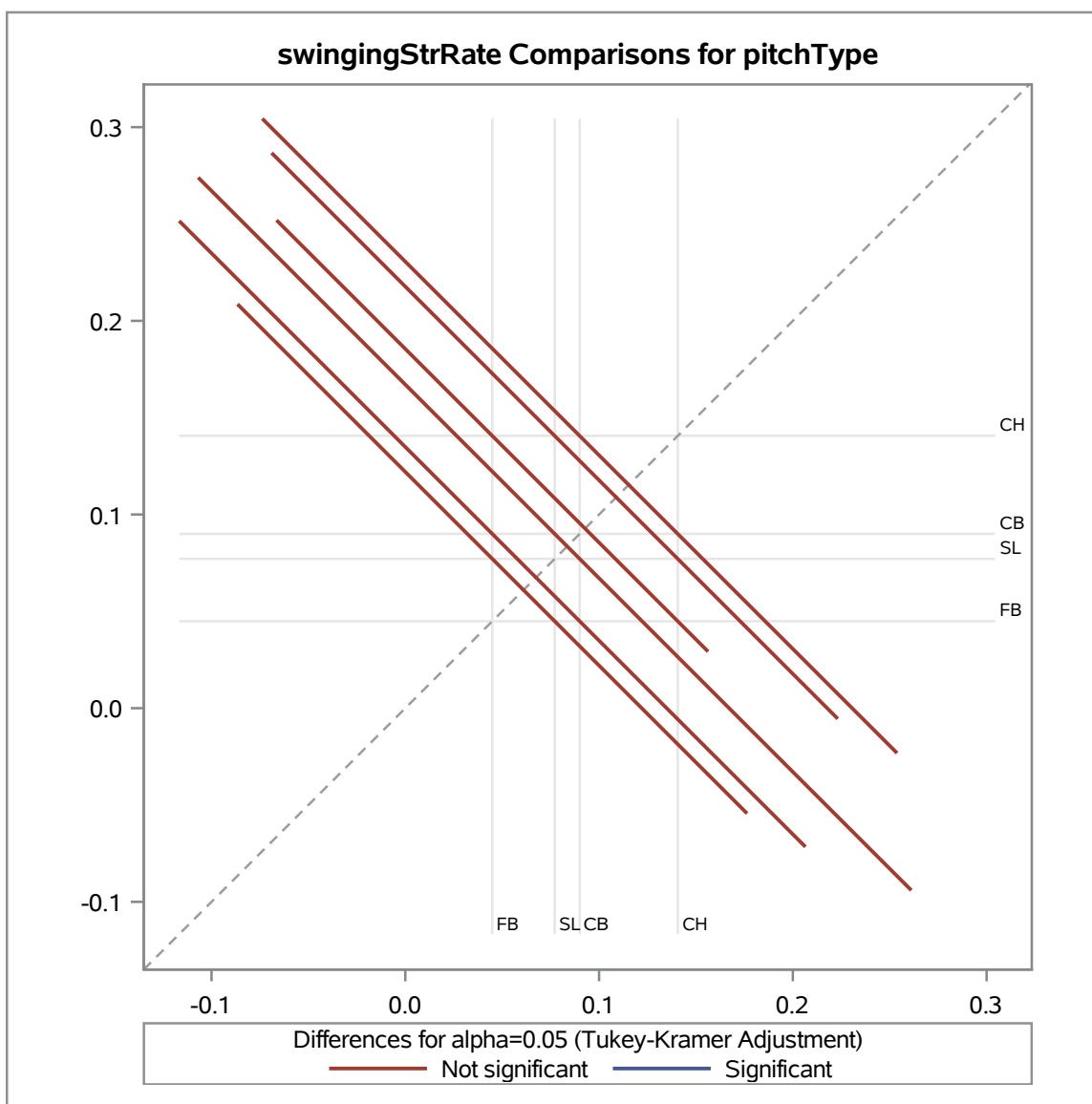
Least Squares Means for Effect pitchType				
i	j	Difference Between Means	Simultaneous 95% Confidence Limits for LSMean(i)-LSMean(j)	
1	2	-0.050613	-0.378189	0.276962
1	3	0.045092	-0.278087	0.368271
1	4	0.012883	-0.355144	0.380911
2	3	0.095706	-0.127003	0.318414

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	0.063497	-0.228681	0.355675
3	4	-0.032209	-0.295178	0.230760



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

Pitch Location	Total Pitches	Total Swings	Total Misses	Swinging Strike Rate
1	1	1	0	0.00%
2	2	2	0	0.00%
3	3	2	0	0.00%
5	3	3	2	66.67%
6	4	2	0	0.00%
8	2	2	0	0.00%
9	4	0	0	0.00%
13	13	1	0	0.00%

Swing and Miss Data by Pitch Type

Pitch Type	Total Pitches	Total Swings	Total Misses	Swinging Strike Rate
CB	6	3	0	0.00%
CH	11	4	1	9.09%
FB	9	4	1	11.11%
SL	6	2	0	0.00%

Data available for home games only

Dependent Variable: velocity

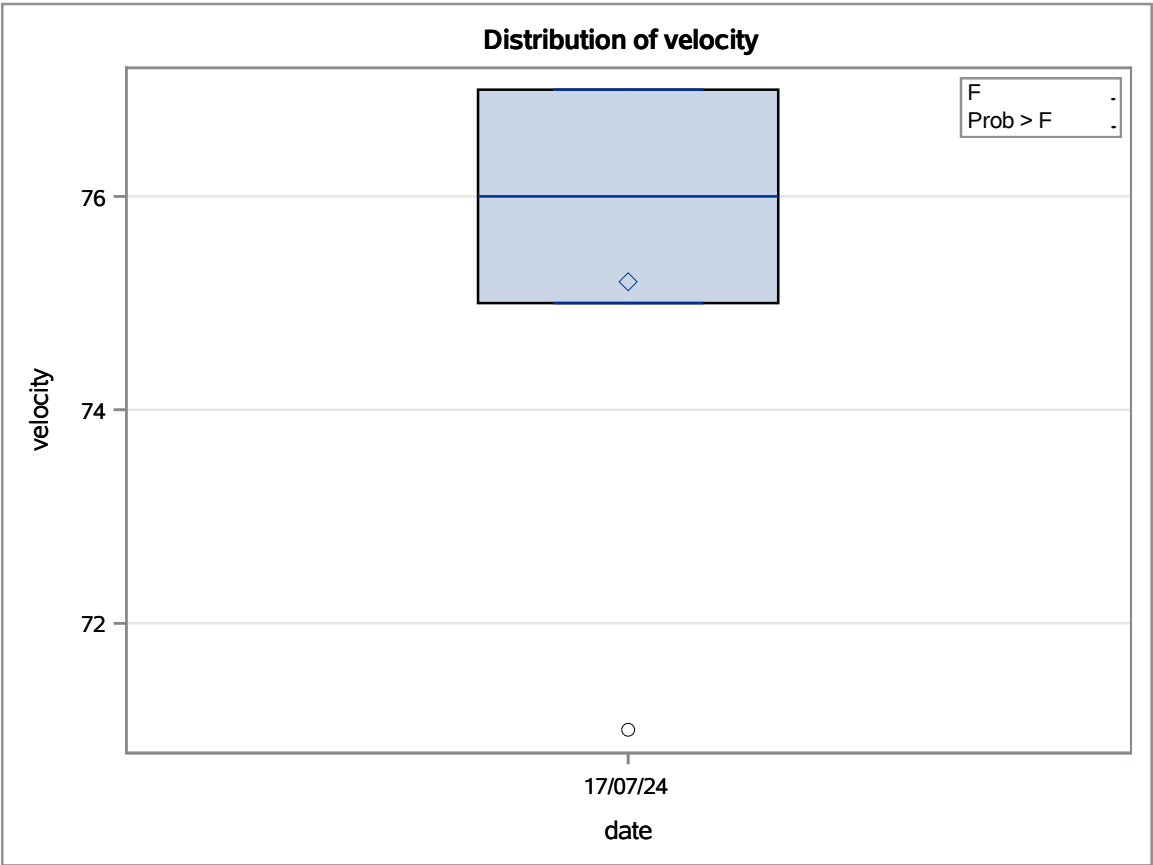
pitchType=CB

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	0	0.00000000	.	.	.
Error	4	24.80000000	6.20000000		
Corrected Total	4	24.80000000			

R-Square	Coeff Var	Root MSE	velocity Mean
0.000000	3.311144	2.489980	75.20000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
date	0	0	.	.	.

Source	DF	Type III SS	Mean Square	F Value	Pr > F
date	0	0	.	.	.



Data available for home games only

Dependent Variable: velocity

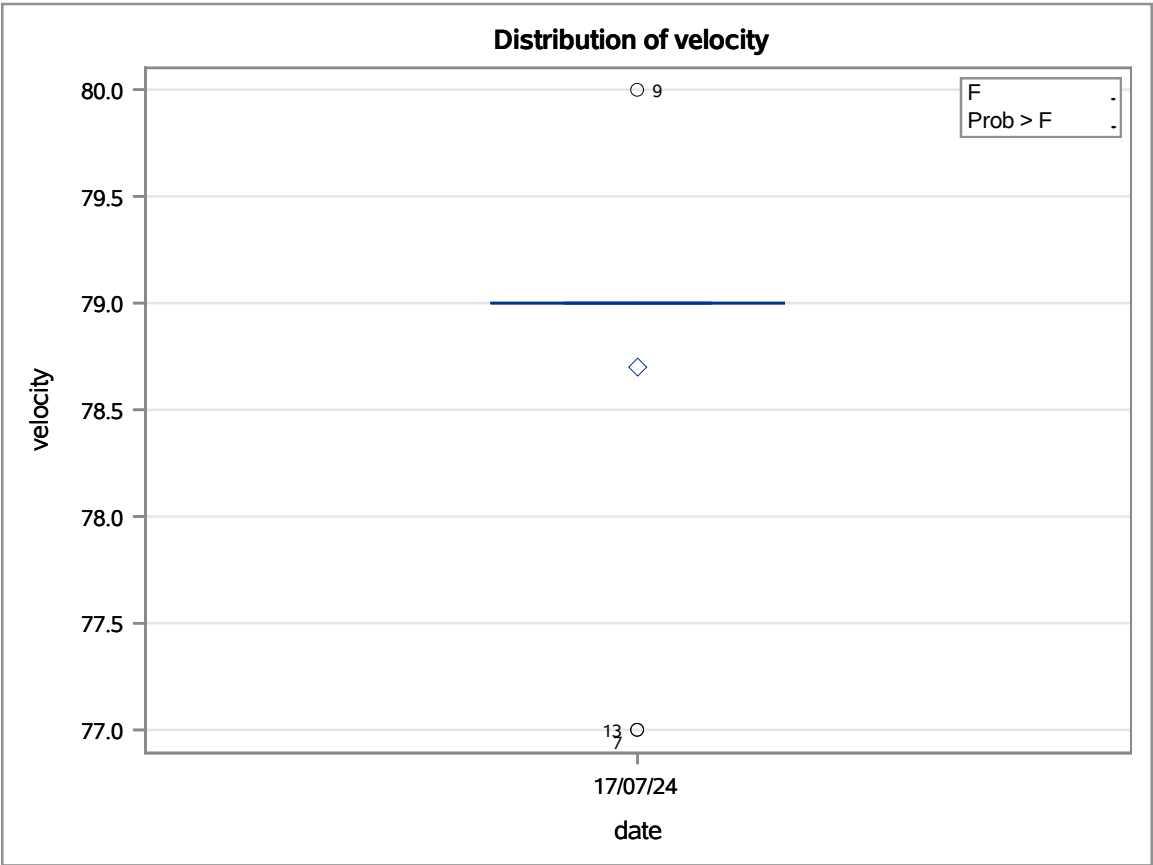
pitchType=CH

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	0	0.00000000	.	.	.
Error	9	8.10000000	0.90000000		
Corrected Total	9	8.10000000			

R-Square	Coeff Var	Root MSE	velocity Mean
0.000000	1.205443	0.948683	78.70000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
date	0	0	.	.	.

Source	DF	Type III SS	Mean Square	F Value	Pr > F
date	0	0	.	.	.



Data available for home games only

Dependent Variable: velocity

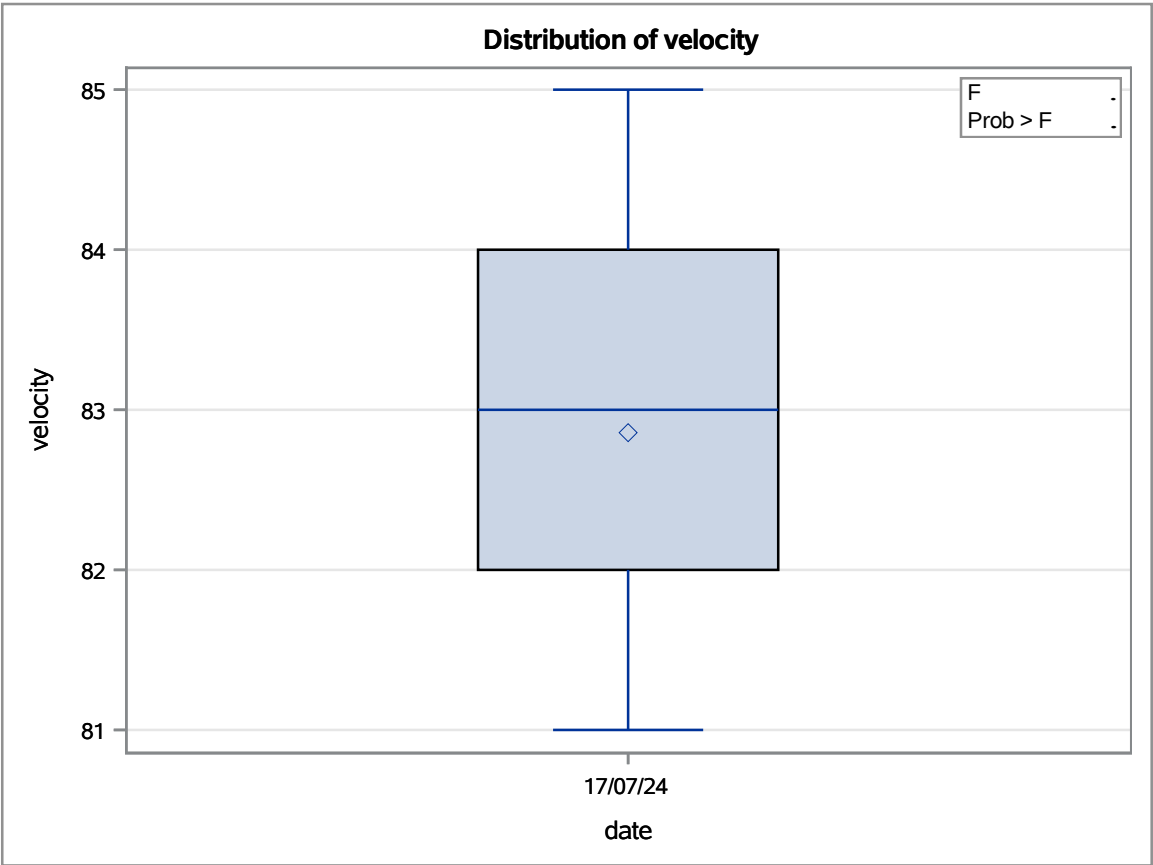
pitchType=FB

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	0	0.00000000	.	.	.
Error	6	10.85714286	1.80952381		
Corrected Total	6	10.85714286			

R-Square	Coeff Var	Root MSE	velocity Mean
0.000000	1.623500	1.345185	82.85714

Source	DF	Type I SS	Mean Square	F Value	Pr > F
date	0	0	.	.	.

Source	DF	Type III SS	Mean Square	F Value	Pr > F
date	0	0	.	.	.



Data available for home games only

Dependent Variable: velocity

pitchType=SL

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	0	0.00000000	.	.	.
Error	3	4.75000000	1.58333333		
Corrected Total	3	4.75000000			

R-Square	Coeff Var	Root MSE	velocity Mean
0.000000	1.661130	1.258306	75.75000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
date	0	0	.	.	.

Source	DF	Type III SS	Mean Square	F Value	Pr > F
date	0	0	.	.	.

