Pitch Usages							
LHH	RHH						
<ul> <li>Against LHH high Sinker usage and mixes in the Slurve which isn't used against RHH</li> <li>Sinker finds the zone 61% of the time, and the heart of the zone 33%</li> <li>Slurve is the chase pitch against LHH inducing a chase whiff 45% of the time</li> <li>Danger pitch</li> <li>With the increased Sinker usage against LHH, overall lower whiff rates versus LHH, thus better opportunities for LHH to put the ball into play</li> </ul>	<ul> <li>Even mix between 4–Seam, Changeup, Curveball and Sinker especially against RHH</li> <li>Likes to stay outside the zone especially with the 4–Seam and Changeup, Sinker will catch the zone the most</li> <li>+ Sinker crosses the heart of the plate 27% of the time it's thrown</li> <li>Changeup is the chase pitch, and has a chase whiff of 48%</li> <li>+ Dangerous pitch</li> <li>Pitches thrown in the zone are a lot less likely to get a whiff but seen less frequent.</li> </ul>						

Result Percentages								
LHH	RHH							
<ul> <li>Large gap between in–zone and out–zone Slurve results</li> <li>+ 19% chase in–play rate for Slurves and a 0% Hard–Hit rate</li> <li>+ Zone–Hard–Hit on slurve at 47%, so look for a mistake in the slurve thrown inside the zone</li> <li>Sinker is a tough chase pitch, with 53% in play on swings only 12% have been hard–hit</li> </ul>	<ul> <li>Changeup has a high-chase rate, but the lowest chase hard-hit rate (only 6%)</li> <li>Changeup has chase in play rate of 34%, so they're put into play but not optimal hits</li> <li>Definitely want to take advantage of the in-zone sinkers has a 62% Zone-Hard-Hit rate</li> </ul>							

Res	ults
LHH	RHH
<ul> <li>Most successful when throwing his Slurve</li> <li>+ Even if put into play only a .094 on his Slurve</li> <li>- The zone-xwOBA on his slurve is the lowest out of them all, definelty a problem pitch</li> <li>- In-Zone Sinkers can do damage on</li> <li>- Out-Zone Sinkers have .420 xwOBA, good chance to put together a good, batted ball as</li> </ul>	<ul> <li>Most successful when throwing his Changeup, posting the lowest wOBA and xwOBA out of all his pitches</li> <li>When Changeup is in–zone those pitches are where batters can do the most damage</li> <li>+ BABIP on In–Zone changeups highest at .351 compared the the Out–Zone changeups BABIP of .082</li> <li>Sinkers can be pitches to hit regardless of In–Zone vs Out–Zone</li> <li>+ Sinkers have 17% chase whiff rates</li> <li>+ But change xwOBA is at .472</li> <li>Curveballs are also pitches to hit</li> <li>+ Heart of the Zone xwOBA at .506 (In the heart only 18% of the time)</li> <li>+ Doesn't miss too often with the curveball</li> </ul>

Sequencing (1)								
LHH	RHH							
<ul> <li>Sinker first pitch most often</li> <li>Slurve is his put away pitch thrown most common in two strike counts</li> <li>Will throw some curveballs in, early in the count but as the PA continues tends to fall back on his Sinker</li> <li>+ Sinker almost always thrown when he needs a strike</li> </ul>	<ul> <li>Even spread between first pitch relying on the curveball</li> <li>+ Put away pitch is his changeup (most used in 2 strike counts)</li> <li>Deeper into counts won't see 4–Seam as much goes to Sinker and curveball</li> <li>Sinker is thrown when he needs a strike (when he is down in the count expect an in–zone sinker)</li> </ul>							

Sequencing (2)							
LHH	RHH						
<ul> <li>First pitch can go either way in or out of the zone</li> <li>Slurves do find the zone a decent amount of the time for a put away pitch</li> <li>+ Especially when he's down and needs a strike</li> <li>Late in the count, relies on the Sinker that's in-zone, won't see much off-speed late especially in the zone</li> </ul>	<ul> <li>First pitches tend to be in the zone, (mainly the curveball and Sinker)</li> <li>Early changeups rarely in the zone especially on 2–strikes</li> <li>+ 2–Strike Changes are the most common and in 0–2 and 1–2 counts barely in the zone</li> <li>Definitely an opportunity to take the first pitches, and get an in–zone Sinker later in the count</li> </ul>						

Sequencing (3)							
LHH	RHH						
<ul> <li>Mainly stays away from the heart with the slurve, but Sinkers find their way there throughout the PA</li> <li>Slurve chases on two strikes the highest even in 0–2 counts</li> <li>+ As the PA goes on Slurve becomes tough the get contact on, whiff rates increase</li> </ul>	<ul> <li>Sinkers will be over the heart of the plate most often especially later in the count</li> <li>Changeups almost never over the heart and the 4–Seam is rarely there too in any count</li> <li>Drops a curveball into the heart of the plate on first pitch 24% of the time could be a pitch to hit</li> <li>0–2 changeups have an 18% swing rate (with a 97% O–Zone rate) so that changeup is most likely identifiable as a throw away pitch.</li> <li>+ 1–2 has a swing rate of 36% and 2–2 has a 67% swing rate on the change</li> <li>+ In all 3 of the counts the changeup is outside the zone over 75% of the time</li> <li>2–2 Changeups have a nearly 60% chase rate compared to 15% 0–2 Changeup chase rate</li> <li>+ Hitters tend to get less disciplined on that changeup as PA goes on</li> <li>3–1 chase on the sinker extremely common and it's thrown over 50% of the time in that count</li> </ul>						

First Pitch							
LHH	RHH						
– Sinker is used almost in all situations and have the highest in play rates	<ul> <li>Goes to the curveball the most, but a 1st pitch sinker is thrown over the heart</li> <li>30% of the time, and has a 58% in play-rate (overall) with a .539 xwOBA</li> <li>As the PA goes on xwOBA goes down, changeups become tougher to hit</li> </ul>						

Sequencing (3)							
LHH	RHH						
- Sinkers ride in on LHH so he's starting off coming at their hip and it breaks							
to reach the inside portion of the plate.	- 4-Seams tend to stay in the same place up and in regardless of the count						
- Sinkers have more horizontal differences between counts	- Sinkers also stay low						
+ In behind counts sinkers stay over the middle	- Changeups start to creep into the zone when he's behind, but he really likes to						
+ In Ahead and Even counts almost a toss up between inside and outside	stay on the low and outside corner with his changeup						
- Slurves stay low and outside	- A lot of up and down changeups between his pitches as he stays pretty consistent						
+ On behind counts he tries to paint the low and outside corner where on even counts, the slurve can creep up in the zone and over the heart	with his horizontal placement of pitches						

	Jose Quintana											
Pitch	Usage	Zone %	Z–Swing %	Heart %	H-Swing %	O-Zone %	Chase %	Whiff %	Z–Whiff %	H–Whiff %	O-Whiff %	
4-Seam	22%	38%	77%	17%	87%	62%	25%	14%	8%	6%	26%	
Changeup	20%	21%	74%	6%	81%	79%	30%	32%	9%	10%	48%	
Curveball	24%	41%	67%	19%	72%	59%	30%	23%	11%	9%	42%	
Sinker	29%	58%	56%	29%	72%	42%	22%	11%	10%	7%	14%	
Slurve	6%	35%	62%	15%	67%	65%	39%	30%	12%	8%	45%	
ALL	100%	41%	65%	18%	75%	59%	28%	20%	10%	7%	36%	

	Jose Quintana vs LHH											
Pitch	Usage	Zone %	Z–Swing %	Heart %	H–Swing %	O-Zone %	Chase %	Whiff %	Z–Whiff %	H–Whiff %	O-Whiff %	
4-Seam	7%	44%	86%	19%	83%	56%	11%	7%	8%	0%	0%	
Changeup	5%	27%	50%	9%	50%	73%	25%	14%	0%	0%	25%	
Curveball	8%	42%	57%	24%	75%	58%	37%	20%	12%	0%	29%	
Sinker	53%	61%	59%	33%	80%	39%	17%	7%	7%	3%	7%	
Slurve	27%	34%	62%	16%	67%	66%	41%	31%	12%	8%	45%	
ALL	20%	49%	61%	25%	77%	51%	27%	16%	9%	4%	31%	

	Jose Quintana vs RHH											
Pitch	Usage	Zone %	Z–Swing %	Heart %	H-Swing %	O-Zone %	Chase %	Whiff %	Z-Whiff %	H–Whiff %	O-Whiff %	
4-Seam	25%	38%	76%	16%	88%	62%	26%	15%	8%	6%	27%	
Changeup	24%	20%	76%	6%	83%	80%	30%	33%	10%	10%	48%	
Curveball	28%	41%	68%	18%	71%	59%	29%	23%	11%	10%	43%	
Sinker	23%	57%	55%	27%	66%	43%	24%	13%	12%	10%	17%	
Slurve	0%	43%	67%	0%		57%	0%	0%	0%			
ALL	80%	39%	66%	17%	74%	61%	28%	21%	10%	9%	37%	

	Jose Quintana											
Pitch	Strike %	Ball %	O-Strike %	BIP %	Z-BIP %	O-BIP %	Hard-Hit %	Z-H-Hit %	O-H-Hit %	Heart-H-Hit %		
4-Seam	54%	46%	54%	31%	37%	19%	38%	43%	21%	52%		
Changeup	47%	53%	47%	43%	56%	34%	28%	46%	9%	50%		
Curveball	63%	37%	63%	46%	55%	33%	34%	43%	10%	56%		
Sinker	67%	33%	67%	48%	50%	39%	52%	58%	23%	59%		
Slurve	60%	40%	60%	39%	62%	19%	36%	50%	0%	62%		
ALL	59%	41%	59%	42%	49%	30%	39%	49%	13%	57%		

	Jose Quintana vs LHH										
Pitch	Strike %	Ball %	O-Strike %	BIP %	Z-BIP %	O-BIP %	Hard-Hit %	Z-H-Hit %	O-H-Hit %	Heart-H-Hit %	
4-Seam	56%	44%	56%	43%	50%	0%	17%	17%		33%	
Changeup	45%	55%	45%	29%	33%	25%	100%	100%	100%		
Curveball	58%	42%	58%	47%	62%	29%	43%	60%	0%	50%	
Sinker	64%	36%	64%	53%	53%	53%	45%	51%	12%	51%	
Slurve	62%	38%	62%	38%	62%	19%	33%	47%	0%	62%	
ALL	62%	38%	62%	47%	55%	29%	41%	49%	12%	52%	

	Jose Quintana vs RHH										
Pitch	Strike %	Ball %	O-Strike %	BIP %	Z-BIP %	O-BIP %	Hard-Hit %	Z-H-Hit %	O-H-Hit %	Heart-H-Hit %	
4-Seam	54%	46%	54%	30%	36%	20%	41%	47%	21%	55%	
Changeup	47%	53%	47%	43%	57%	34%	26%	44%	6%	50%	
Curveball	63%	37%	63%	46%	54%	34%	33%	42%	11%	57%	
Sinker	69%	31%	69%	45%	49%	33%	56%	62%	29%	66%	
Slurve	29%	71%	29%	50%	50%	_	100%	100%	_	_	
ALL	58%	42%	58%	41%	48%	30%	39%	50%	13%	59%	

Jose Quintana										
Pitch	wOBA	xwOBA	xBA	BABIP	ISO	Z-wOBA	Z-xwOBA	Z-xBA	Z-BABIP	Z-ISO
4-Seam	.340	.356	.284	.128	.181	.389	.359	.312	.211	.298
Changeup	.252	.267	.313	.190	.060	.403	.370	.360	.342	.132
Curveball	.335	.343	.356	.211	.156	.418	.388	.390	.299	.264
Sinker	.380	.400	.366	.178	.194	.341	.376	.384	.197	.260
Slurve	.258	.240	.299	.091	.182	.333	.288	.268	.056	.333

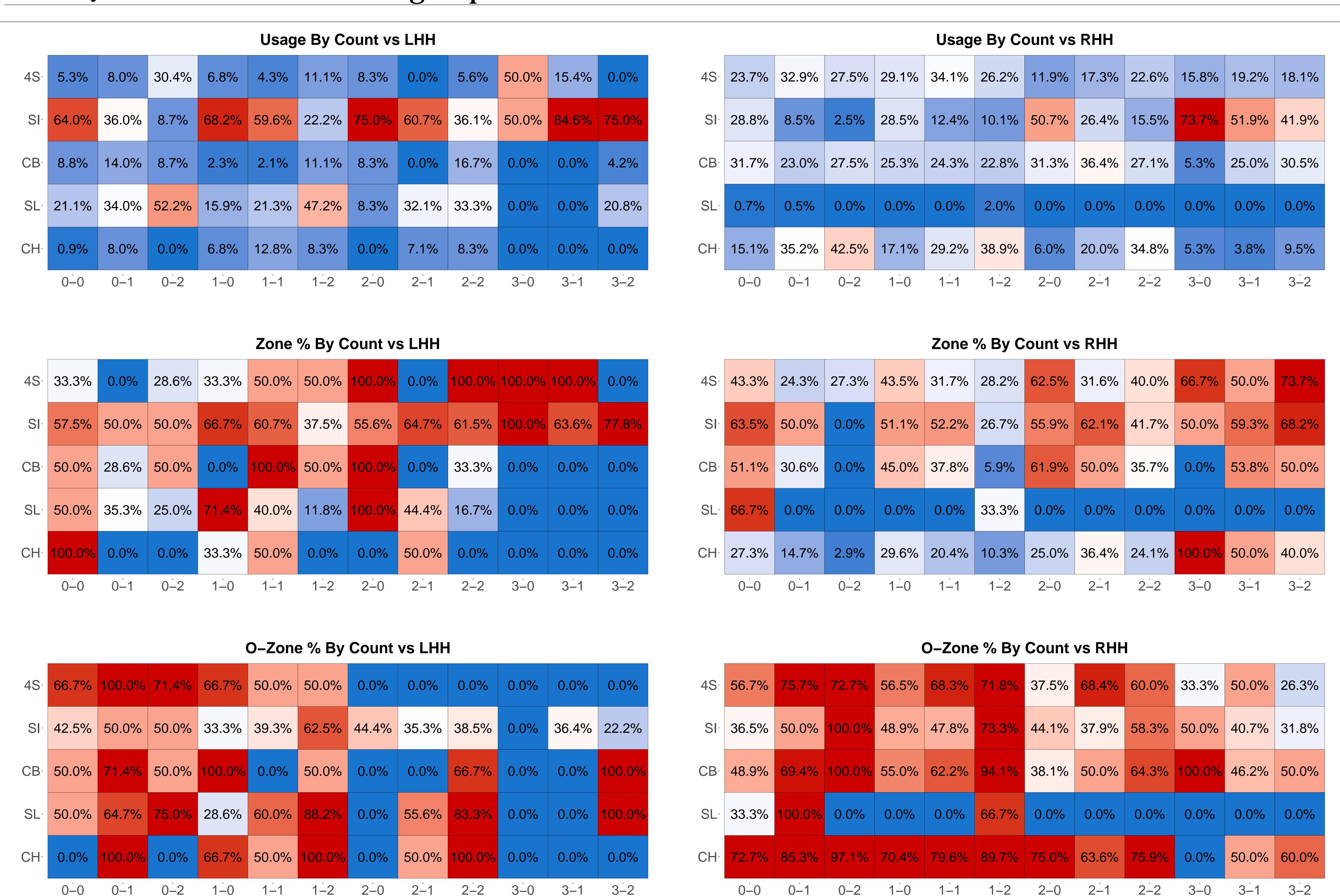
	Jose Quintana vs LHH										
Pitch	wOBA	xwOBA	xBA	BABIP	ISO	Z-woba	Z-xwOBA	Z-xBA	Z-BABIP	Z-ISO	
4-Seam	.286	.251	.220	.000	.429	.333	.292	.220	.000	.500	
Changeup	.625	.706	.744	.500	.500	.000	.556	.597	.000	.000	
Curveball	.562	.364	.320	.250	.625	.750	.433	.388	.333	.833	
Sinker	.355	.346	.340	.215	.154	.304	.325	.364	.216	.157	
Slurve	.266	.236	.296	.094	.188	.353	.282	.262	.059	.353	

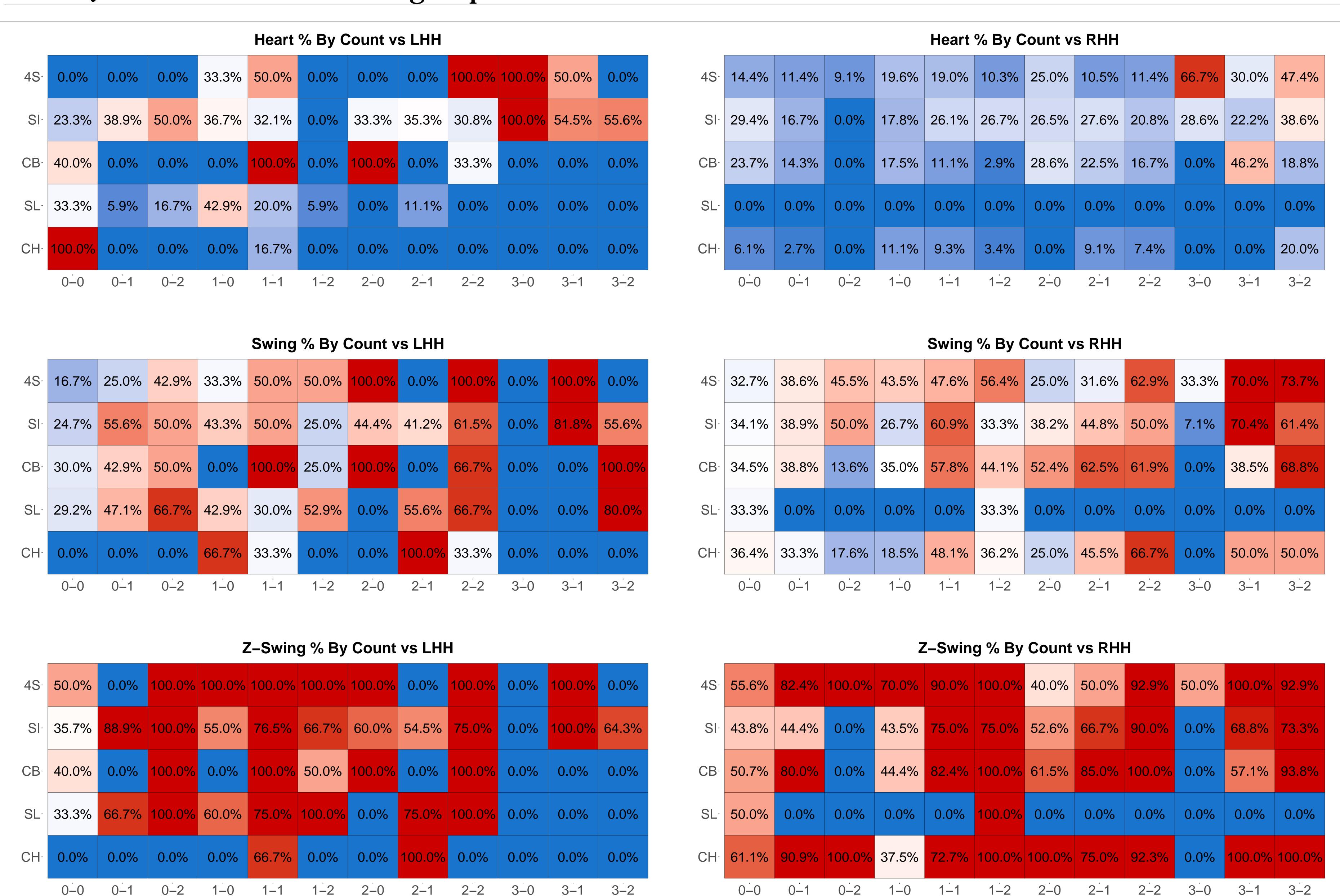
	Jose Quintana vs RHH										
Pitch	wOBA	xwOBA	xBA	BABIP	ISO	Z-woba	Z-xwOBA	Z-xBA	Z-BABIP	Z-ISO	
4-Seam	.345	.364	.290	.138	.161	.396	.367	.324	.235	.275	
Changeup	.245	.258	.300	.184	.051	.414	.365	.353	.351	.135	
Curveball	.322	.341	.359	.209	.129	.393	.385	.391	.296	.222	
Sinker	.394	.430	.384	.157	.217	.365	.409	.398	.184	.329	
Slurve	.000	.385	.349	.000	.000	.000	.385	.349	.000	.000	

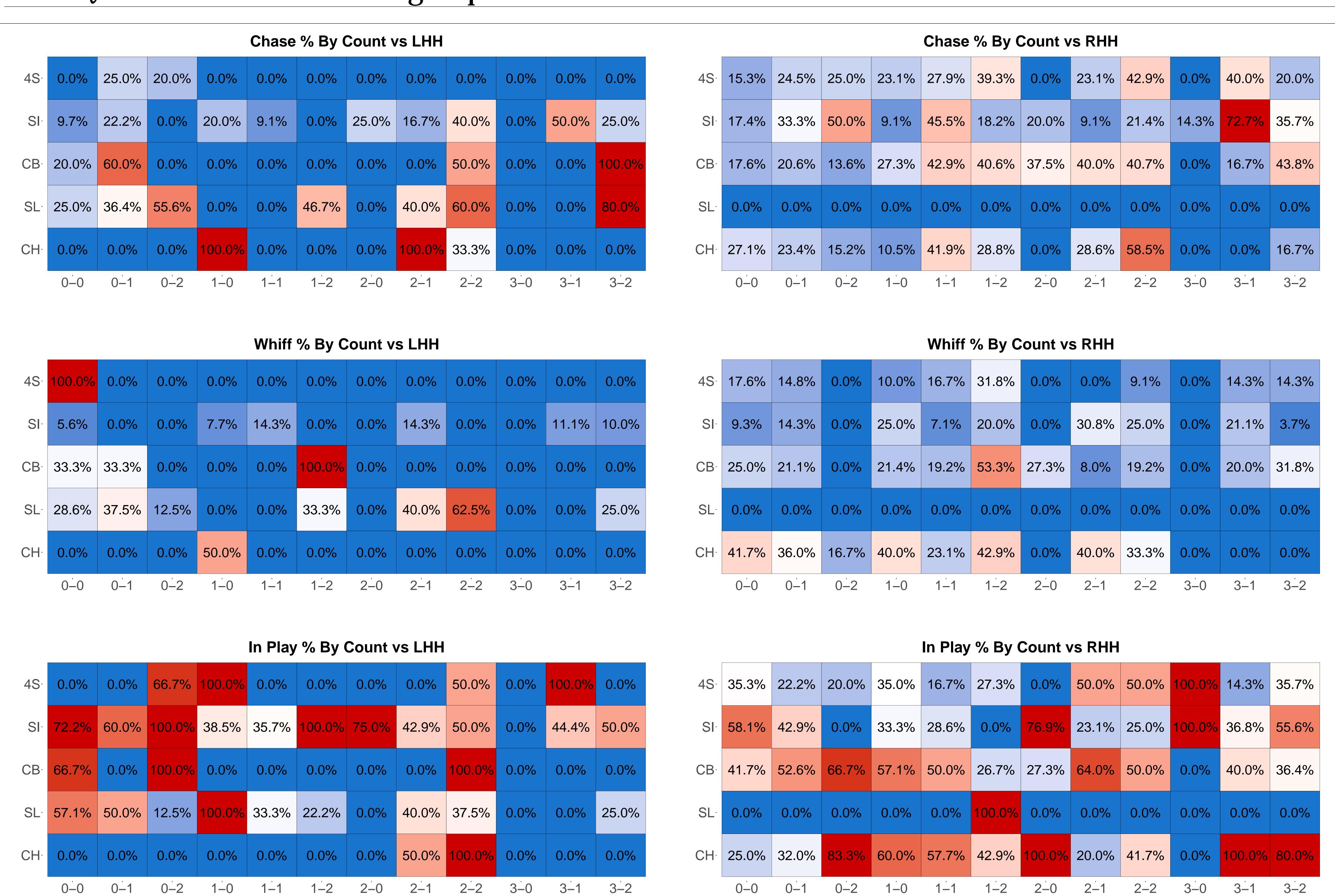
	Jose Quintana									
Pitch	O-wOBA	O-xwOBA	O-xBA	O-BABIP	O-ISO	H-wOBA	H-xwOBA	H-xBA	H-BABIP	H-ISO
4-Seam	.265	.350	.181	.000	.000	.390	.402	.348	.240	.280
Changeup	.160	.203	.262	.097	.016	.317	.382	.302	.083	.250
Curveball	.215	.278	.270	.083	.000	.518	.507	.453	.366	.341
Sinker	.475	.458	.284	.132	.038	.331	.401	.372	.157	.313
Slurve	.167	.186	.381	.133	.000	.667	.403	.368	.111	.667

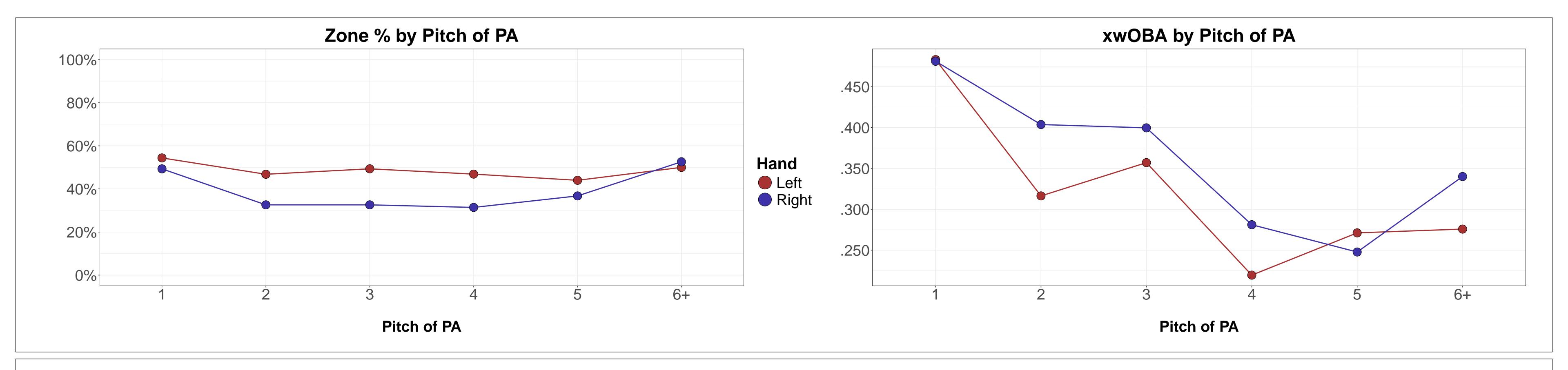
	Jose Quintana vs LHH										
Pitch	O-wOBA	O-xwOBA	O-xBA	O-BABIP	O-ISO	H-wOBA	H-xwOBA	H-xBA	H-BABIP	H-ISO	
4-Seam	.000	.000		.000	.000	.667	.418	.295	.000	1.000	
Changeup	1.250	.855	.891	1.000	1.000		_				
Curveball	.000	.158	.150	.000	.000	.812	.513	.361	.250	1.000	
Sinker	.543	.420	.216	.214	.143	.304	.340	.336	.211	.184	
Slurve	.167	.186	.381	.133	.000	.667	.403	.368	.111	.667	

	Jose Quintana vs RHH										
	Pitch	O-wOBA	O-xwOBA	O-xBA	O-BABIP	O-ISO	H-wOBA	H-xwOBA	H-xBA	H-BABIP	H-ISO
	4-Seam	.272	.359	.181	.000	.000	.352	.400	.355	.273	.182
(	Changeup	.143	.193	.243	.082	.000	.317	.382	.302	.083	.250
	Curveball	.222	.282	.279	.086	.000	.486	.506	.463	.378	.270
	Sinker	.451	.472	.323	.103	.000	.353	.452	.404	.111	.422
	Slurve									<u>—</u>	<u> </u>





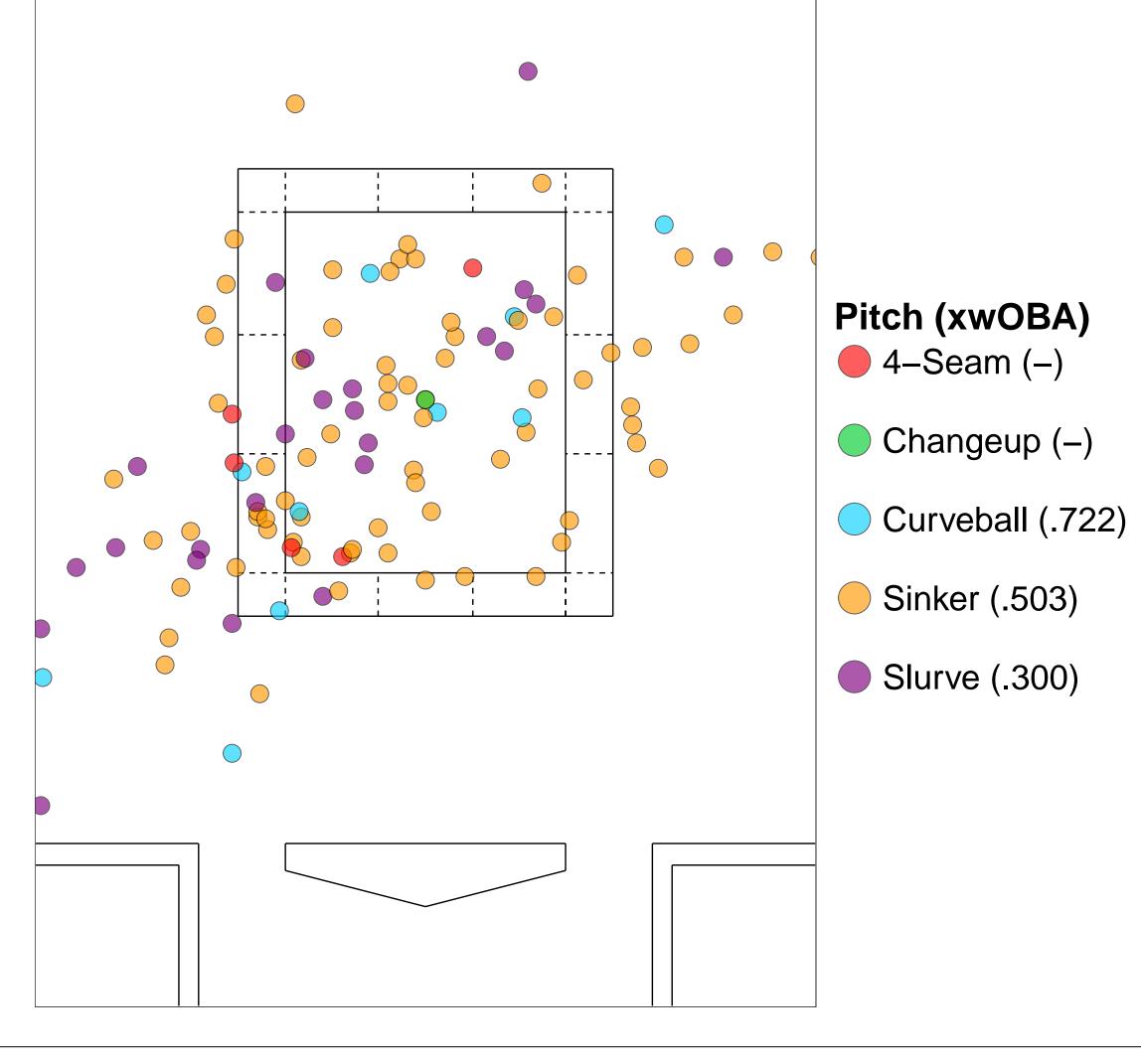




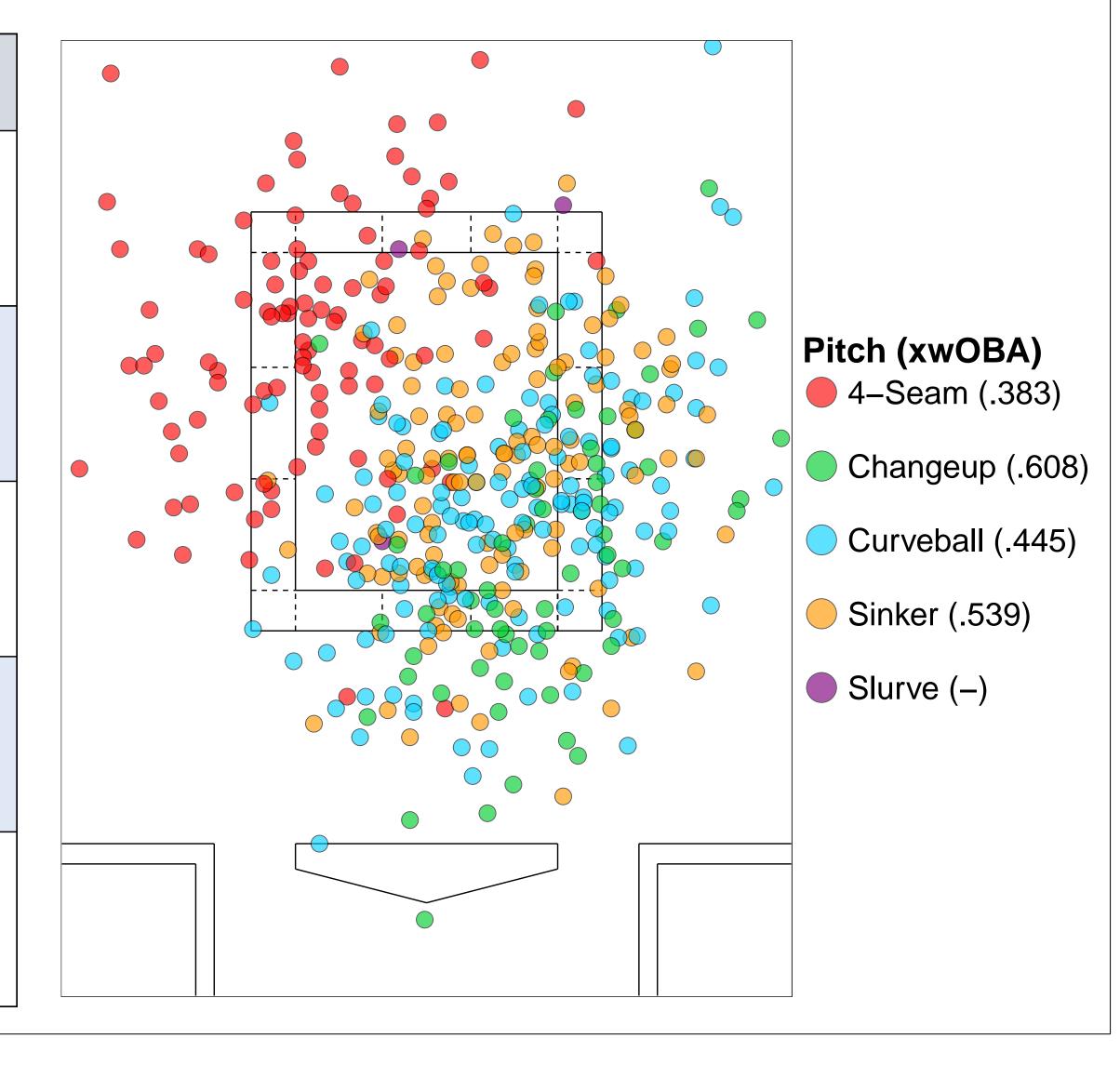
	First Pitch Usage vs LHH									
Most	After	After	After Field Out	After	Men in					
Frequent	Strikeout	Walk		Hit	Scoring					
Sinker	Sinker	Sinker	Sinker	Sinker	Sinker					
(64.0%)	(58.3%)	(64.3%)	(59.5%)	(68.8%)	(47.6%)					

	First Pitch Usage vs RHH									
Most	After	After	After Field Out	After	Men in					
Frequent	Strikeout	Walk		Hit	Scoring					
Curveball	Curveball	4-Seam	Curveball	Sinker	Curveball					
(31.7%)	(31.0%)	(45.7%)	(41.0%)	(30.3%)	(30.9%)					

Pitch	Zone	Heart	Swing	BIP
SI	58%	23%	25%	72%
CU	50%	40%	30%	67%
4S	33%	0%	17%	0%
СН	100%	100%	0%	
SL	50%	33%	29%	57%



Pitch	Zone	Heart	Swing	BIP
SI	63%	29%	34%	58%
CU	51%	24%	35%	42%
4S	43%	14%	33%	35%
СН	27%	6%	36%	25%
SL	67%	0%	33%	0%



Top 5 Two Pitch Sequences vs LHH								
Sequence	Usage	Swing % Whiff %		Chase %	BIP %			
SI-SI	24.9%	48.5%	4.2%	17.6%	45.8%			
SI-SL	10.6%	57.1%	25.0%	40.9%	41.7%			
SL-SI	10.6%	50.0%	9.5%	13.3%	52.4%			
SL-SL	7.6%	60.0%	38.9%	50.0%	22.2%			
SI-4S	6.0%	41.7%	20.0%	20.0%	10.0%			

Top 5 Two Pitch Sequences vs RHH								
Sequence	Usage	Swing % Whiff %		Chase %	BIP %			
CU-CU	8.0%	42.3%	18.2%	25.6%	45.5%			
4S-4S	7.9%	41.1%	7.5%	18.2%	35.8%			
SI-SI	7.4%	39.2%	8.5%	21.2%	53.2%			
4S-CU	6.7%	48.6%	18.9%	31.3%	60.4%			
CH-CU	6.5%	49.1%	23.1%	28.8%	46.2%			

Situational Results vs LHH								
Pitch	Situation	Usage	Zone %	Heart %	Chase %	Whiff %	BIP %	wOBA
4-Seam	Ahead	14%	27%	0%	18%	0%	33%	.000
	Even	5%	50%	30%	0%	25%	25%	.000
	Behind	6%	71%	43%	0%	0%	75%	.667
	Ahead	26%	46%	29%	13%	0%	69%	.200
Sinker	Even	58%	59%	26%	13%	8%	55%	.432
	Behind	70%	67%	43%	25%	9%	47%	.339
	Ahead	12%	38%	0%	38%	40%	20%	.625
Curveball	Even	9%	47%	41%	33%	12%	75%	.542
	Behind	2%	33%	33%	50%	0%	0%	_
	Ahead	42%	24%	9%	46%	28%	28%	.164
Slurve	Even	23%	39%	22%	32%	39%	44%	.223
	Behind	18%	45%	18%	50%	25%	50%	.475
Changeup	Ahead	6%	0%	0%	0%	_	_	_
	Even	5%	40%	20%	17%	0%	33%	1.250
	Behind	4%	40%	0%	100%	25%	25%	.000
Total	Ahead	25%	30%	11%	30%	18%	39%	.194
	Even	46%	52%	26%	20%	16%	52%	.396
	Behind	29%	62%	37%	36%	12%	46%	.379

Situational Results vs RHH									
Pitch	Situation	Usage	Zone %	Heart %	Chase %	Whiff %	BIP %	wOBA	
4-Seam	Ahead	30%	26%	11%	29%	19%	24%	.343	
	Even	26%	39%	15%	24%	15%	33%	.297	
	Behind	21%	50%	26%	23%	10%	34%	.407	
Sinker	Ahead	8%	37%	20%	27%	15%	23%	.325	
	Even	22%	59%	28%	23%	12%	46%	.439	
	Behind	38%	59%	27%	25%	14%	47%	.374	
Curveball	Ahead	24%	16%	8%	26%	32%	43%	.288	
	Even	29%	46%	20%	28%	22%	46%	.300	
	Behind	29%	50%	23%	34%	21%	48%	.356	
Slurve	Ahead	1%	25%	0%	0%	0%	100%	.000	
	Even	0%	67%	0%	0%	0%	0%	_	
	Behind	0%	_	_				_	
Changeup	Ahead	38%	11%	2%	23%	37%	42%	.191	
	Even	22%	24%	7%	42%	33%	42%	.169	
	Behind	13%	35%	11%	16%	27%	50%	.565	
Total	Ahead	26%	19%	7%	26%	27%	35%	.266	
	Even	45%	42%	18%	30%	21%	42%	.296	
	Behind	30%	51%	23%	26%	17%	45%	.392	

