have success there.

Notes

Facing RHH, Quintana has even mix w/ 4S/CH/CB/SI SI only pitch in–zone over 50%. CH o–zone 80% of the time, w/ 33% and 50% chase–whiff. 17% Heart–Zone SI the greatest 26%. CH the danger pitch w/ 35% whiff, any pitch in zone hittable all below 15% Z–Whiff. SI hit the hardest (54%), anything O–Zone tough to get good contact (11% O–Hard–Hit). CH most successful for contact (.236 xwOBA .047 ISO). SI biggest threat O–Zone w/ .467 xwOBA .440 wOBA. Starts PA w/ FB or CB then uses CH early in count, throws it out later. 2K counts expect CH O–Zone. First pitch can expect in–zone then stays out of zone unless he is behind. 1st pitch 4S will be up and in, rest will be low & away. After a walk uses 4S 1st pitch higher than his AVG. Likes to go back to back w/ same pitch type (4S–4S most freq. sequence). CB to 4S does a lot of damage w/ a 26% chase, 22% whiff. Impressive b/c the velo diff is 13 MPH, VB diff is 24 in. and HB diff is 11 in on AVG (huge change in pitches). When behind CH usage goes to 10%, and batters have had most success .448 wOBA. 4S consistently up and in and SI lives w/ O/S low and away. CH almost always outside the zone, CB starts to creep into zone and up if he is looking for a strike. Overall, Chourio is spotty on the high 4S but can hit the SI where Quintana places his SI. Also the CH is a tough pitch location for Chourio and does not get many hard–hits off it. Would reccomend using mixing 4S/CB/CH and leaving SI out. CB low & away for a strike then back with the 4S up is a good way to start. Changing velos will be huge in the PA.

Facing LHP, Chourio chases ~30%, whiffs on CH, Z–Whiff vs O–Whiff 20% – 50%, inducing a chase keeps the ball from going in play. Does not hit the ball hard O–Zone, make Quintana throw I–Zone. Can do damage vs SI, but has had most success vs 4S. Likes zone–CB w/ .625 wOBA & .500 Z–ISO. Will Swing at 1st Pitches in–zone, loves to swing at 1st pitch CH. Leaves CB alone early (even in–zone 20% swing). Will chase when behind, ahead stays discipline. Later in the count he gets, less likely ball is put into play. Back to Back FBs do not get him to swing as much as working in an O/S or BB before/after. Break to FB gets a 55% Chase and a 70% Swing on FB. FB to Break gets a 50% chase and a 25% whiff. Mixing velocities works well here. When he gets ahead and forces a zone pitch he becomes very dangerous. Even if pitcher is behind will chase the CH 25% of the time & whiffs on it 35% of the time. Tends to like the 4S middle of zone will whiff up and away. Is able to get good contact on the low SI and does not do well against the low & away CH. Overall recognize the Quintana lives outside the zone and do not chase pitches getting yourself down

	Jose Quintana vs RHH										
Pitch	Usage	Zone %	Z–Swing %	Heart %	H-Swing %	O-Zone %	Chase %	Whiff %	Z–Whiff %	H–Whiff %	O-Whiff %
4-Seam	26%	39%	75%	19%	82%	61%	27%	15%	10%	9%	26%
Changeup	23%	20%	75%	6%	81%	80%	33%	35%	13%	8%	49%
Curveball	26%	39%	66%	18%	70%	61%	28%	23%	10%	8%	43%
Sinker	24%	56%	56%	26%	67%	44%	24%	12%	10%	10%	20%
ALL	84%	39%	66%	17%	73%	61%	28%	21%	10%	9%	37%

early and have to fend off O/S low and away that could be called a strike. CBs & SIs tend to drop in the zone, look for a good FB to hit and can

	Jackson Chourio vs LHP											
Pitch	Usage	Zone %	Z–Swing %	Heart %	H-Swing %	O-Zone %	Chase %	Whiff %	Z–Whiff %	H–Whiff %	O-Whiff %	
4-Seam	35%	59%	70%	34%	76%	41%	27%	21%	14%	11%	44%	
Changeup	19%	42%	80%	19%	74%	57%	30%	31%	20%	6%	52%	
Curveball	6%	33%	50%	14%	20%	67%	29%	23%	17%	0%	29%	
Sinker	18%	58%	65%	29%	79%	42%	23%	17%	7%	12%	55%	
ALL	30%	52%	71%	27%	74%	48%	29%	23%	14%	10%	47%	

	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	56%	44%	56%	33%	38%	23%	37%	43%	18%	48%		
Changeup	49%	51%	49%	41%	53%	34%	24%	45%	4%	50%		
Curveball	62%	38%	62%	45%	54%	32%	33%	42%	9%	56%		
Sinker	68%	32%	68%	45%	48%	34%	54%	62%	21%	62%		
ALL	59%	41%	59%	41%	47%	31%	37%	49%	11%	56%		

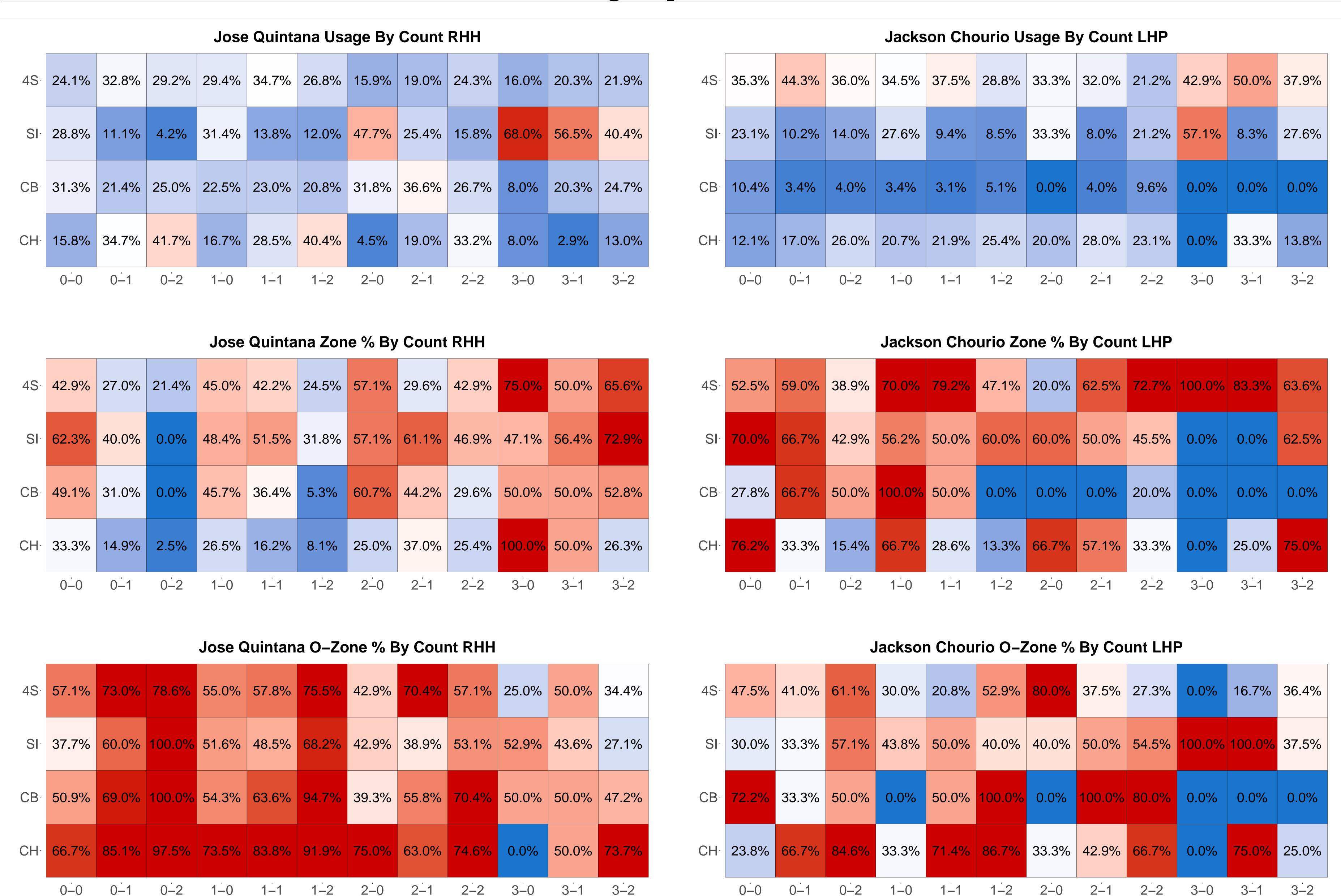
	Jackson Chourio LHP											
Pit	ch	Strike %	Ball %	O-Strike %	BIP %	Z-BIP %	O-BIP %	Hard-Hit %	Z-H-Hit %	O-H-Hit %	Heart-H-Hit %	
4–Se	eam	69%	31%	69%	38%	37%	40%	43%	47%	30%	52%	
Chan	geup	63%	37%	63%	32%	39%	19%	25%	31%	0%	43%	
Curv	eball	53%	47%	53%	23%	33%	14%	33%	50%	0%		
Sin	ker	67%	33%	67%	50%	56%	27%	52%	58%	0%	73%	
AL	_L	67%	33%	67%	39%	45%	23%	42%	47%	15%	52%	

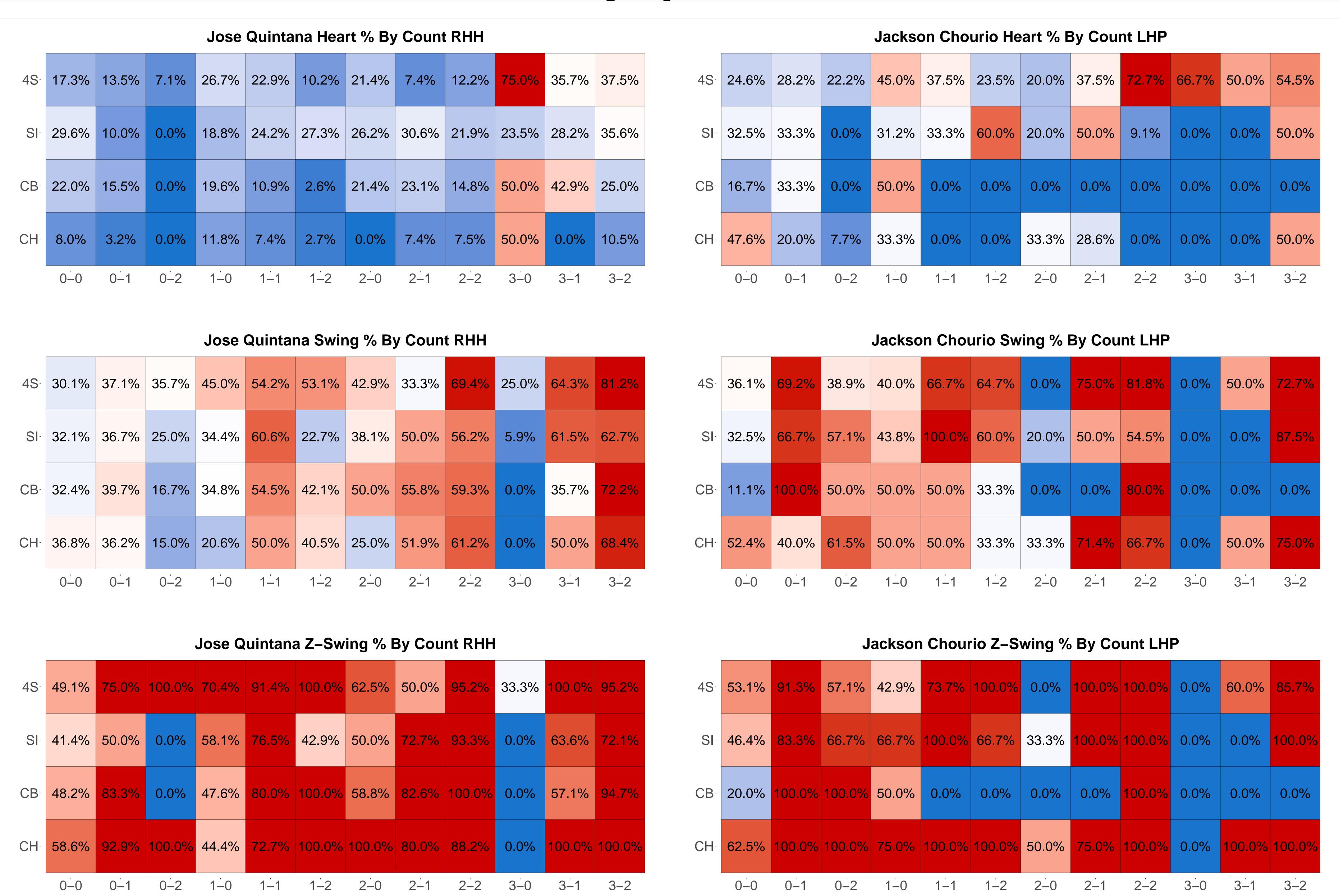
	Jose Quintana vs RHH										
Pitch	wOBA	xwOBA	xBA	BABIP	ISO	Z-woba	Z-xwOBA	Z-xBA	Z-BABIP	Z-ISO	
4-Seam	.329	.348	.276	.149	.149	.351	.355	.307	.208	.250	
Changeup	.233	.236	.287	.181	.047	.388	.350	.357	.333	.133	
Curveball	.329	.340	.352	.212	.141	.392	.378	.372	.286	.231	
Sinker	.351	.400	.364	.150	.170	.308	.367	.375	.175	.252	

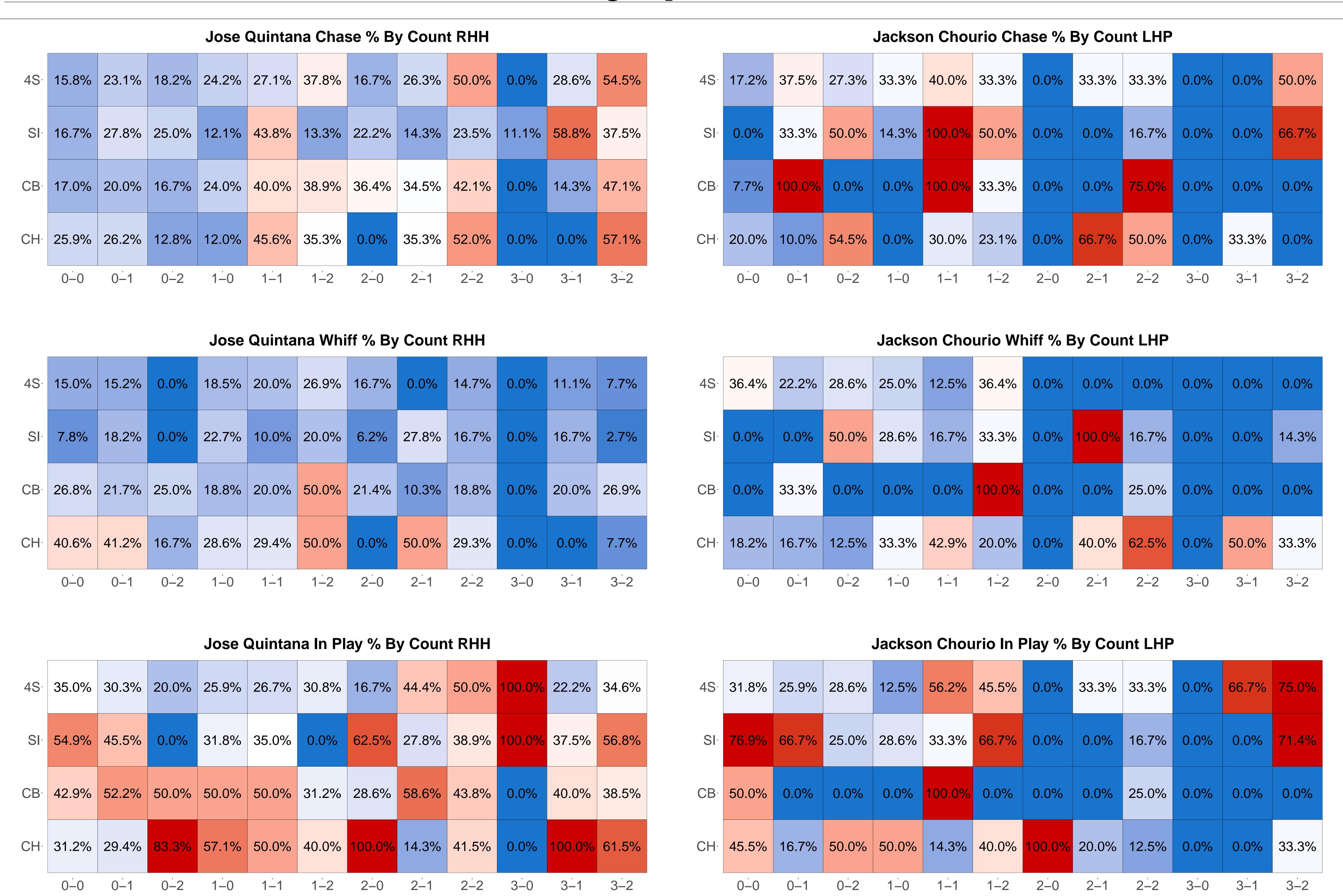
	Jackson Chourio vs LHP										
Pitch	wOBA	xwOBA	xBA	BABIP	ISO	Z-wOBA	Z-xwOBA	Z-xBA	Z-BABIP	Z-ISO	
4-Seam	.336	.341	.331	.250	.125	.298	.317	.317	.220	.171	
Changeup	.342	.317	.345	.212	.091	.437	.369	.344	.316	.158	
Curveball	.250	.202	.327	.200	.200	.625	.471	.463	.500	.500	
Sinker	.303	.286	.246	.179	.128	.333	.303	.269	.259	.185	

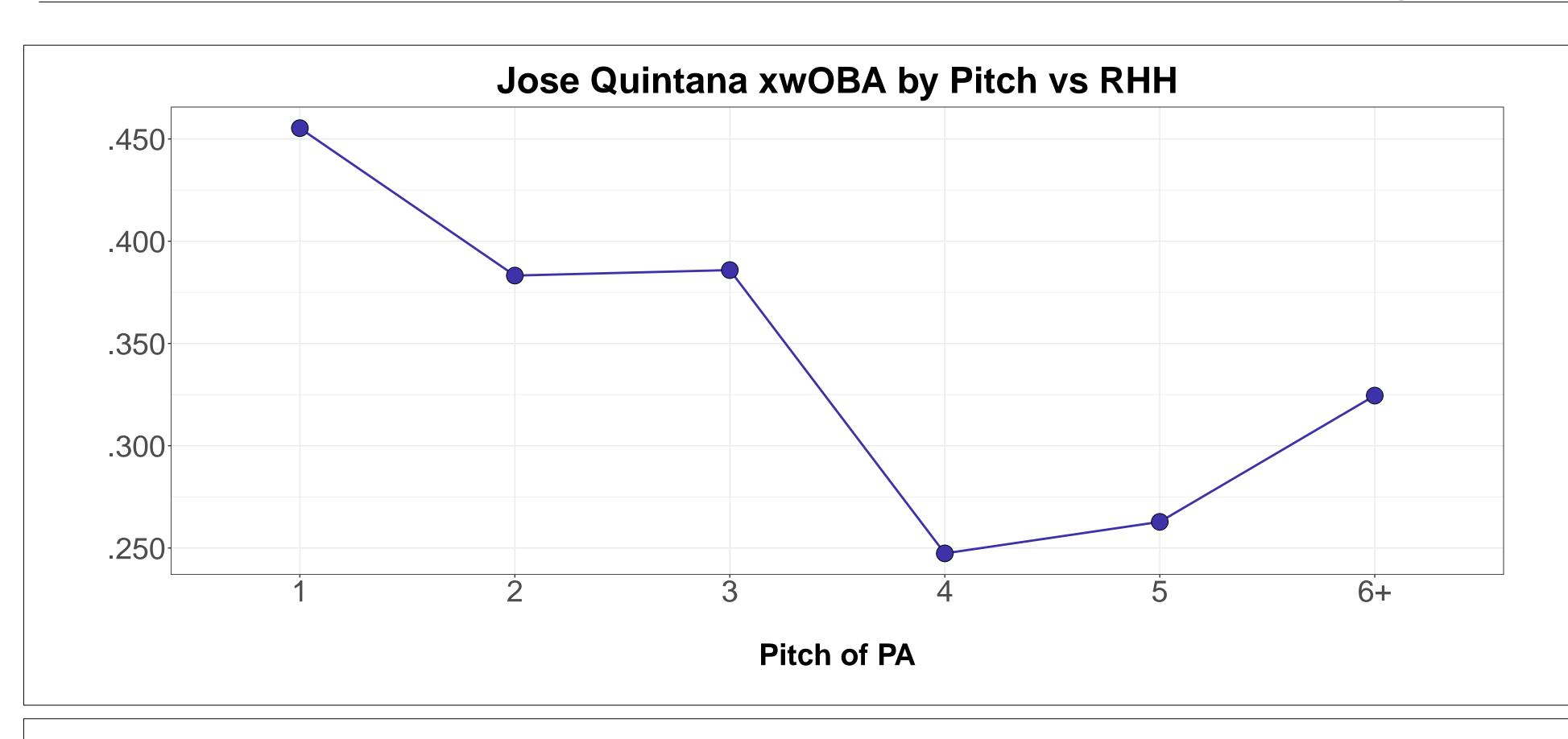
	Jose Quintana vs RHH											
Pitch	O-wOBA	O-xwOBA	O-xBA	O-BABIP	O-ISO	H-wOBA	H-xwOBA	H-xBA	H-BABIP	H-ISO		
4-Seam	.298	.338	.187	.061	.000	.279	.339	.304	.226	.129		
Changeup	.148	.174	.222	.098	.000	.294	.354	.294	.125	.188		
Curveball	.242	.288	.302	.108	.015	.486	.479	.428	.349	.302		
Sinker	.440	.467	.318	.100	.000	.305	.406	.386	.121	.328		

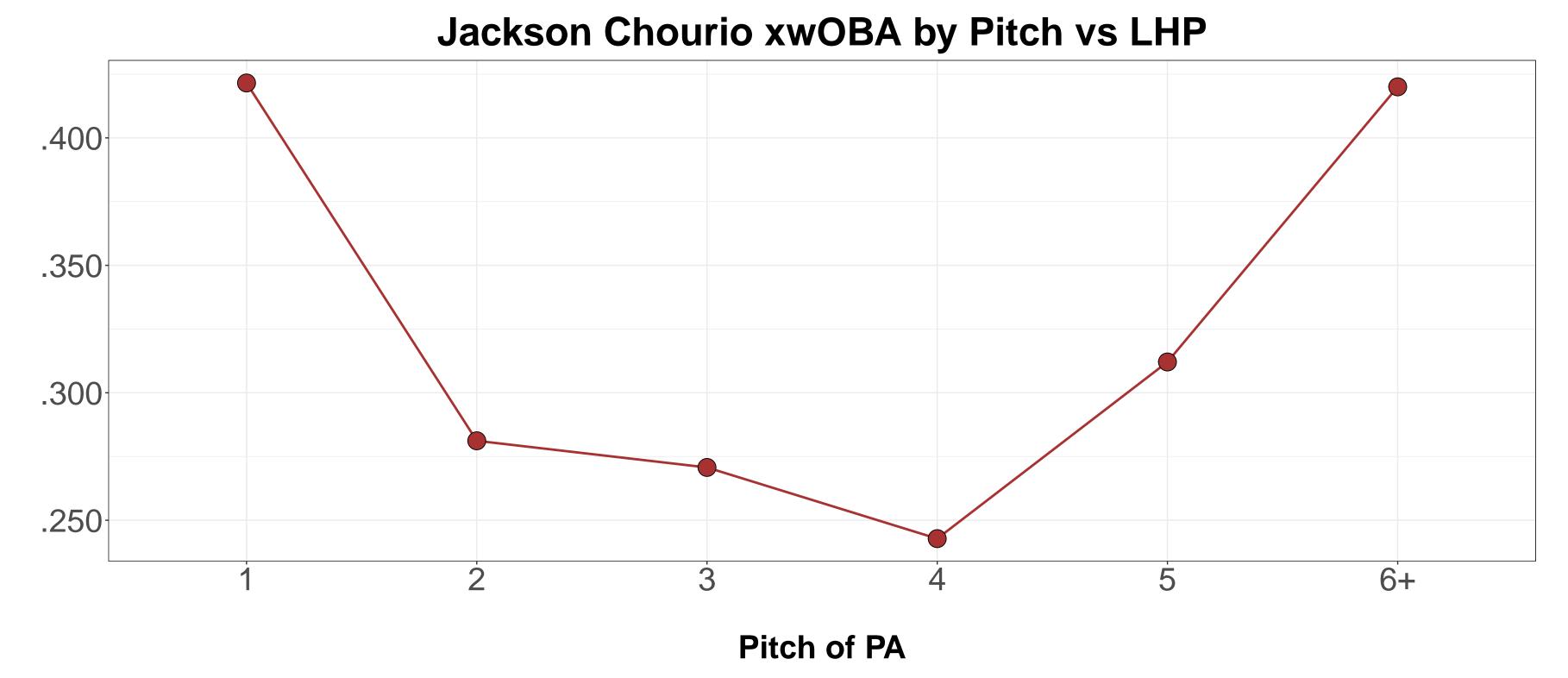
	Jackson Chourio vs LHP										
Pitch	O-wOBA	O-xwOBA	O-xBA	O-BABIP	O-ISO	H-wOBA	H-xwOBA	H-xBA	H-BABIP	H-ISO	
4-Seam	.440	.408	.377	.333	.000	.346	.343	.323	.250	.250	
Changeup	.214	.248	.350	.071	.000	.671	.567	.400	.286	.429	
Curveball	.000	.023	.054	.000	.000						
Sinker	.233	.247	.056	.000	.000	.372	.399	.334	.250	.250	







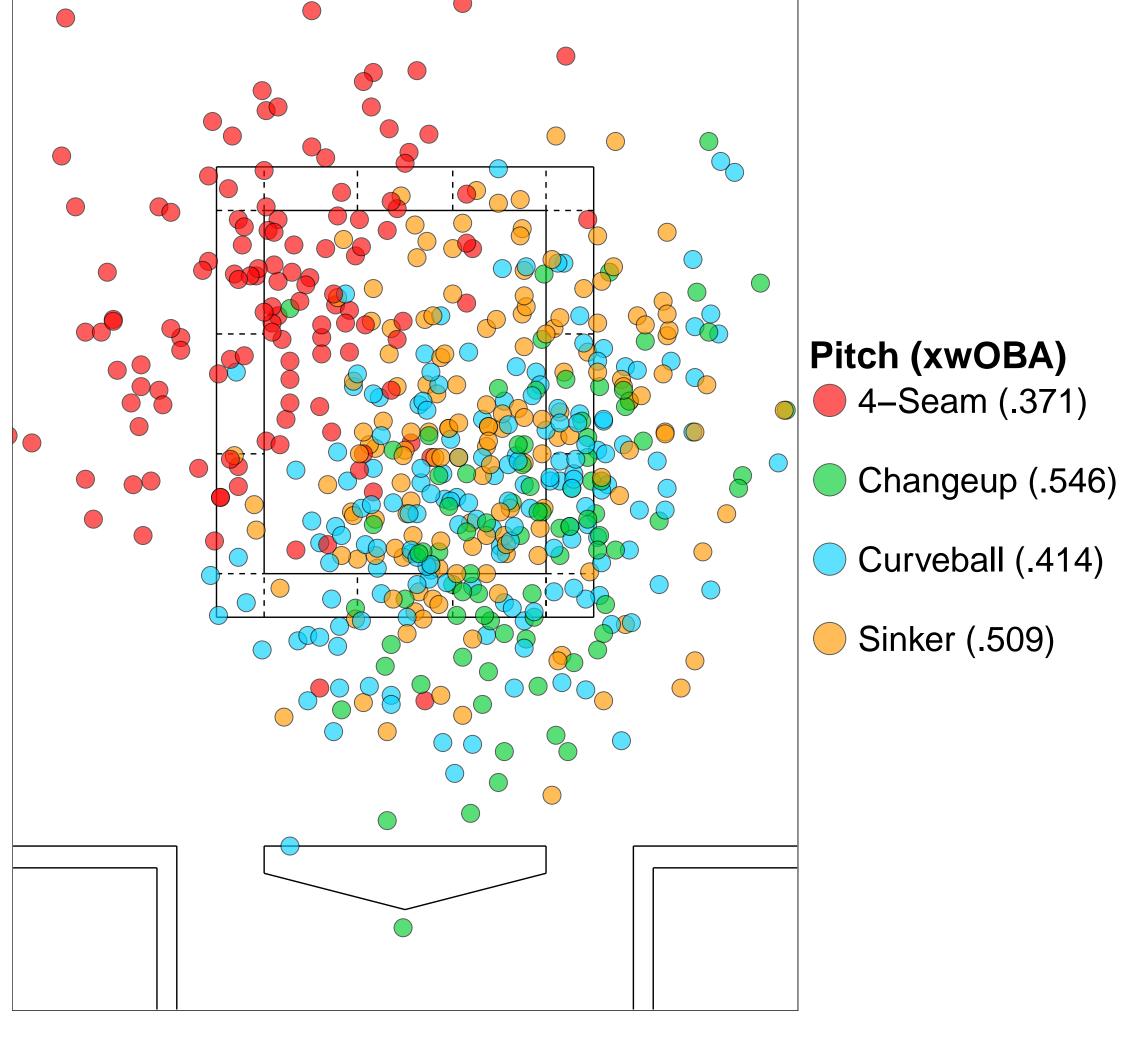




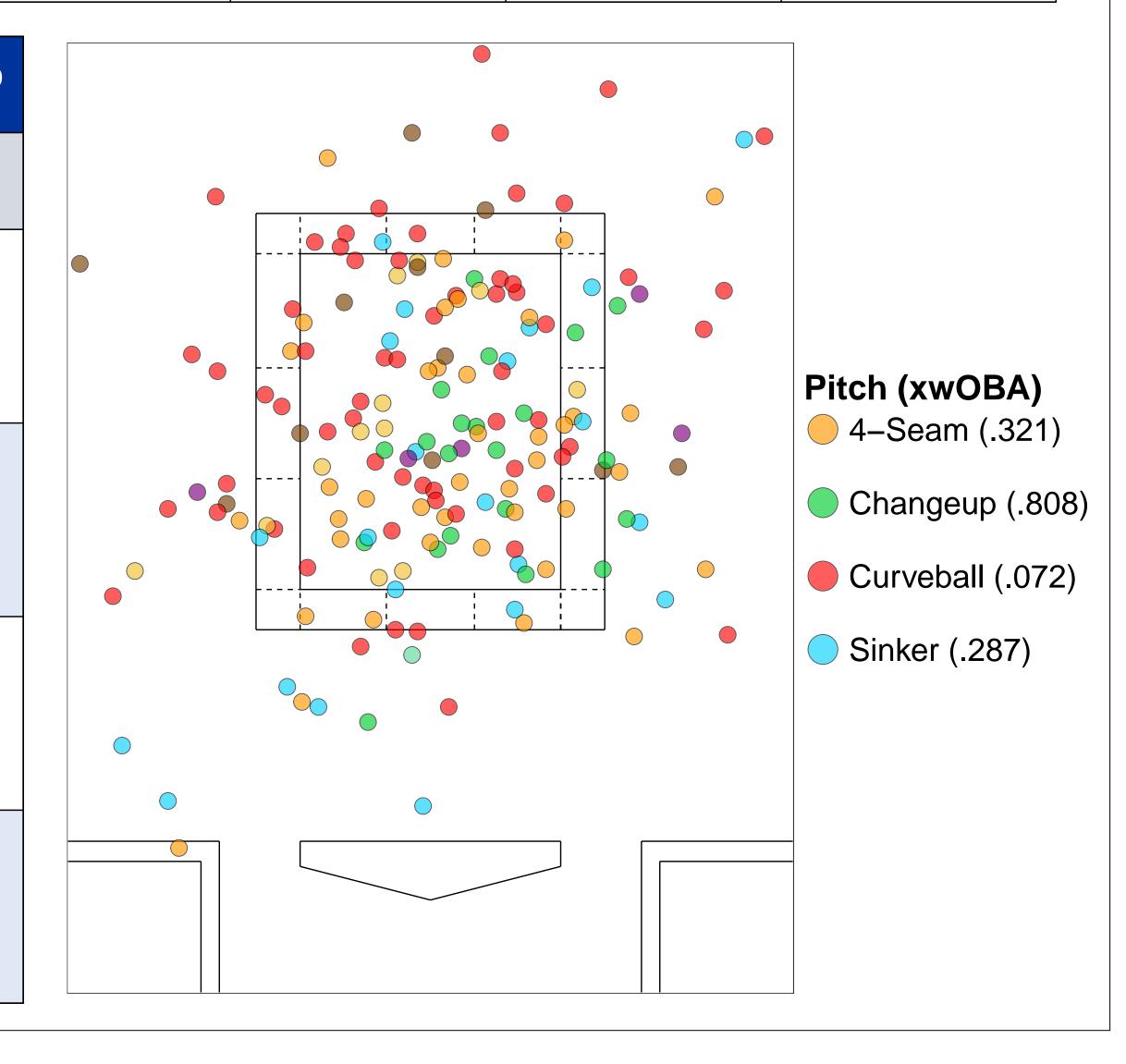
	Jose Quintana 1st-Pitch Usage vs RHH									
Most	After	After	After Field Out	After	Men in					
Frequent	Strikeout	Walk		Hit	Scoring					
Curveball	Curveball	4-Seam	Curveball	Sinker	Curveball					
(31.3%)	(31.3%)	(39.1%)	(38.9%)	(31.2%)	(29.2%)					

Jackson Chourio 1st–Pitch Swing % vs LHP										
1st Time Seeing	2nd Time Seeing	3rd Time Seeing	After Strikeout	After Hit	Men in Scoring					
37%	39%	31%	34%	33%	53%					

Jose Quintana vs RHH										
Pitch	Zone	Heart	Swing	BIP						
SI	62%	30%	32%	55%						
4S	43%	17%	30%	35%						
CU	49%	22%	32%	43%						
СН	33%	8%	37%	31%						



Jackson Chourio vs LHP										
Pitch	Zone	Heart	Swing	BIP						
4S	52%	25%	36%	32%						
SI	70%	32%	32%	77%						
СН	76%	48%	52%	45%						
CU	28%	17%	11%	50%						



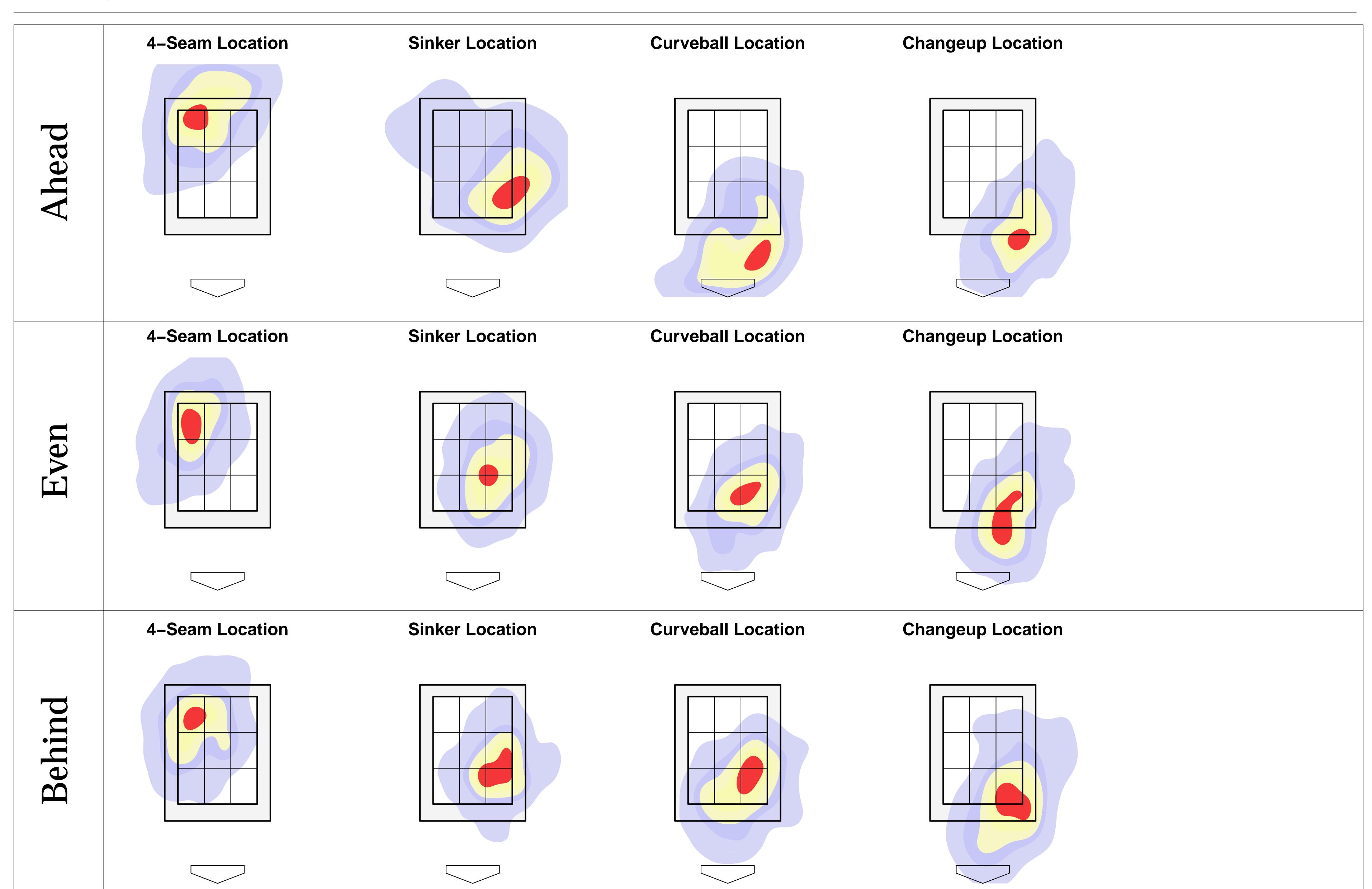
Jose Quintana Two Pitch Sequences vs RHH							
Sequence	Usage	Swing %	Whiff %	Chase %	Zone %		
4S-4S	8.9%	47.0%	13.8%	20.0%	45.9%		
SI-SI	8.3%	40.7%	10.0%	18.9%	57.0%		
CU-CU	7.2%	41.3%	19.4%	24.7%	35.3%		
CU-4S	6.4%	40.3%	22.2%	26.4%	35.1%		
CU-SI	6.4%	40.6%	16.7%	30.3%	50.4%		

Jackson Chourio Two Pitch Sequences vs LHP								
Sequence	Usage	Swing %	Whiff %	Chase %	BIP %			
FAST-FAST	34.1%	49.0%	22.1%	19.7%	35.1%			
FAST-OFF	13.3%	52.5%	21.9%	27.0%	31.2%			
OFF-FAST	11.5%	71.7%	13.2%	42.9%	50.0%			
BRK-FAST	11.3%	69.2%	16.7%	55.0%	33.3%			
FAST-BRK	11.3%	61.5%	25.0%	48.4%	37.5%			

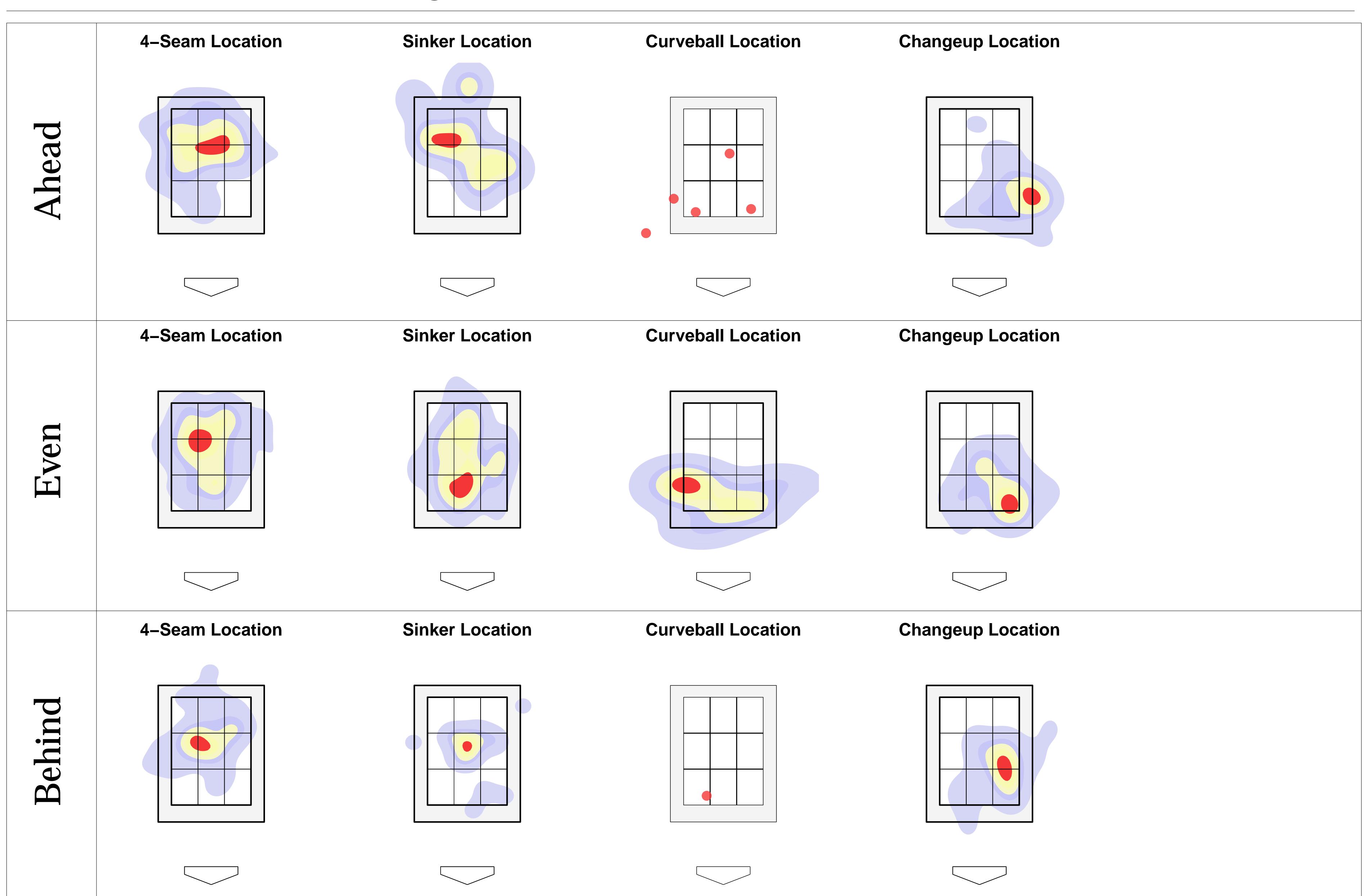
Jose Quintana Situational Results vs RHH								
Pitch	Situation	Usage	Zone %	Heart %	Chase %	Whiff %	BIP %	wOBA
	Ahead	30%	25%	11%	27%	17%	29%	.366
4-Seam	Even	27%	43%	18%	26%	17%	36%	.292
	Behind	22%	49%	27%	29%	12%	31%	.355
	Ahead	10%	34%	16%	22%	18%	29%	.163
Sinker	Even	23%	58%	28%	23%	10%	47%	.413
	Behind	38%	58%	27%	25%	14%	45%	.341
	Ahead	22%	17%	8%	26%	33%	44%	.279
Curveball	Even	28%	43%	18%	28%	23%	45%	.281
	Behind	26%	49%	24%	32%	19%	46%	.398
	Ahead	38%	10%	2%	27%	43%	39%	.159
Changeup	Even	22%	26%	8%	41%	33%	41%	.196
	Behind	13%	32%	10%	28%	28%	44%	.448
	Ahead	25%	19%	8%	26%	30%	36%	.243
Total	Even	45%	42%	18%	30%	21%	42%	.292
	Behind	30%	50%	24%	28%	16%	42%	.373

Jackson Chourio Situational Results vs LHP									
Pitch	Situation	Usage	Zone %	Heart %	Chase %	Whiff %	BIP %	wOBA	
4-Seam	Ahead	38%	51%	26%	33%	27%	31%	.180	
	Even	33%	61%	33%	22%	21%	40%	.434	
	Behind	36%	66%	45%	28%	8%	44%	.440	
Sinker	Ahead	11%	57%	29%	44%	23%	54%	.254	
	Even	20%	63%	28%	19%	8%	52%	.143	
	Behind	25%	50%	31%	17%	25%	44%	.550	
Curveball	Ahead	4%	38%	12%	40%	40%	0%	.000	
	Even	9%	28%	12%	28%	14%	43%	.312	
	Behind	2%	67%	33%	0%	0%	0%		
Changeup	Ahead	22%	21%	9%	29%	16%	37%	.164	
	Even	16%	51%	21%	35%	38%	27%	.467	
	Behind	21%	60%	30%	25%	35%	35%	.390	
Total	Ahead	31%	42%	20%	32%	23%	38%	.229	
	Even	46%	57%	27%	26%	24%	40%	.320	
	Behind	23%	58%	36%	30%	21%	38%	.435	

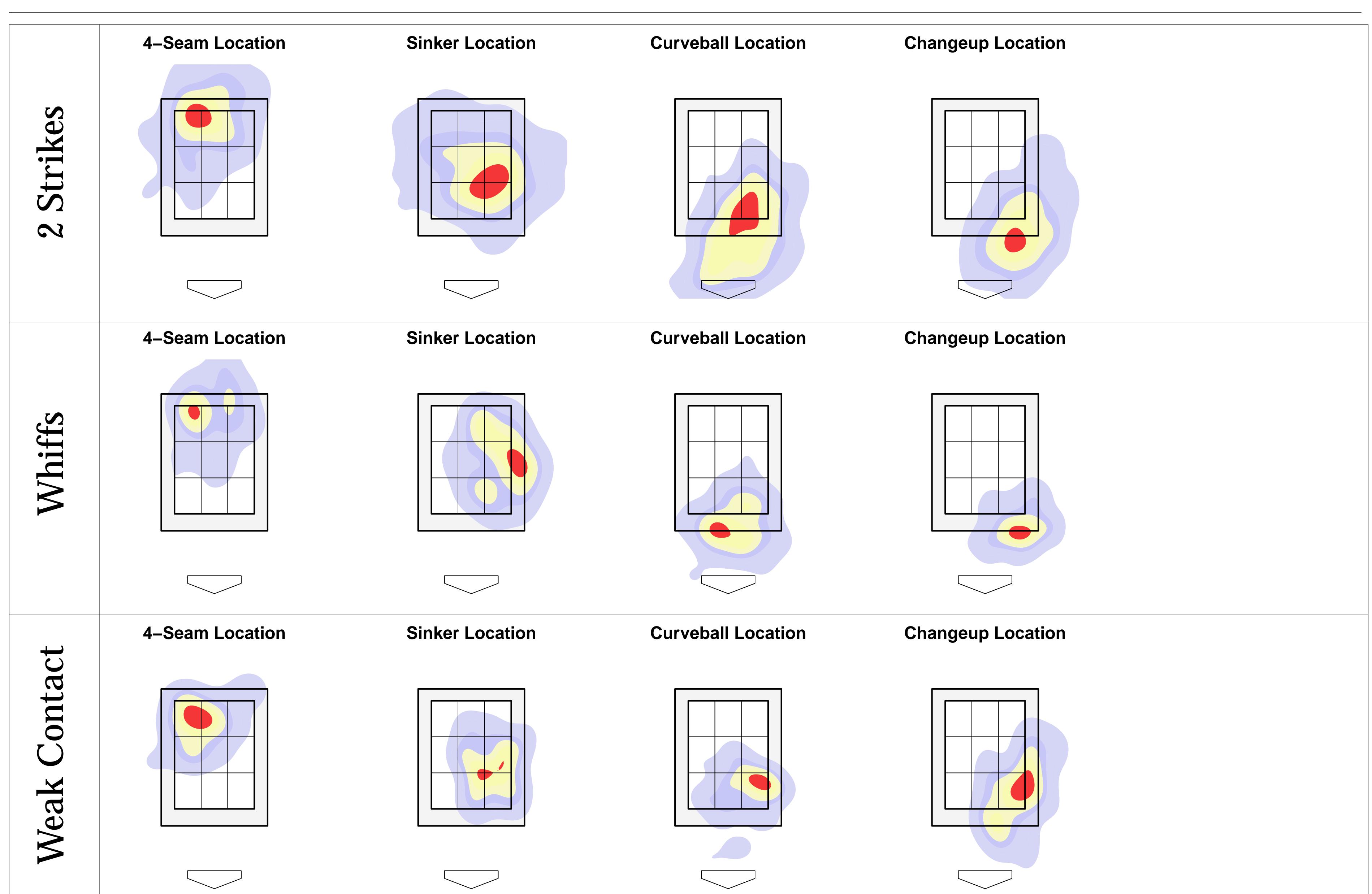
Jose Quintana vs RHH Pitch Location



Jackson Chourio vs LHP Swing Location



Jose Quintana vs RHH Pitch Location



Jackson Chourio vs LHP Swing Location

