

UCSB Gaucho Plate Discipline

The following pages contain plate discipline analyses of returning UCSB hitters. For each subset of all pitches, fastballs, and breaking balls, we created the following:

- Summary table of plate discipline statistics
- Whiff rate heat map with swing contour
- Exit velocity heat map with swing contour

The plate discipline statistics are calculated using Fall 2018 - Spring 2019 home game and scrimmage data, and the heat maps are created using data since Winter 2018.

The whiff rate and exit velocity heat maps are overlaid with a swing density contour (white/black line). These plots can be used to identify hitters who swing often in locations where they miss a lot or hit the ball weakly, essentially helping identify poor swing decisions.

The importance of these statistics is that they are calculated using a model of the Big West strike zone (data includes only UCSB Home Games) instead of the old fashioned rectangular zone. The estimated strike zones for LHH and RHH appear below. For the plate discipline statistics, we used the 50% confidence ellipse approximation of the strike zone (pitches inside have a greater than 50% chance of being called a strike and pitches outside have a less than 50% chance of being called a strike).

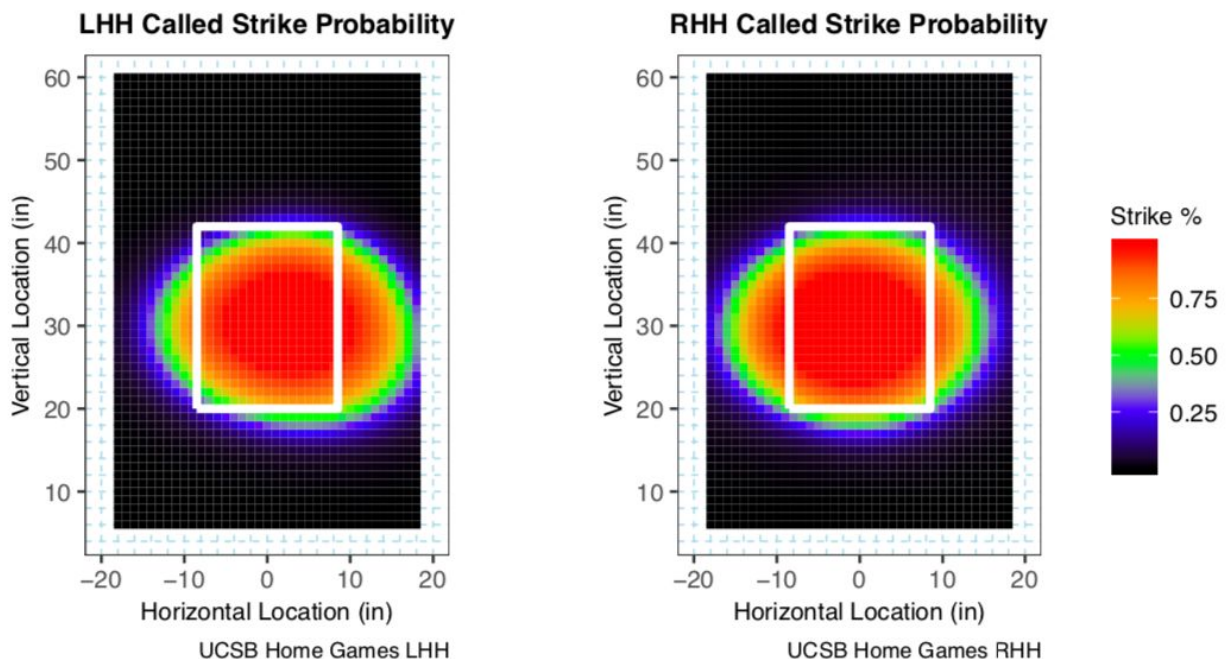


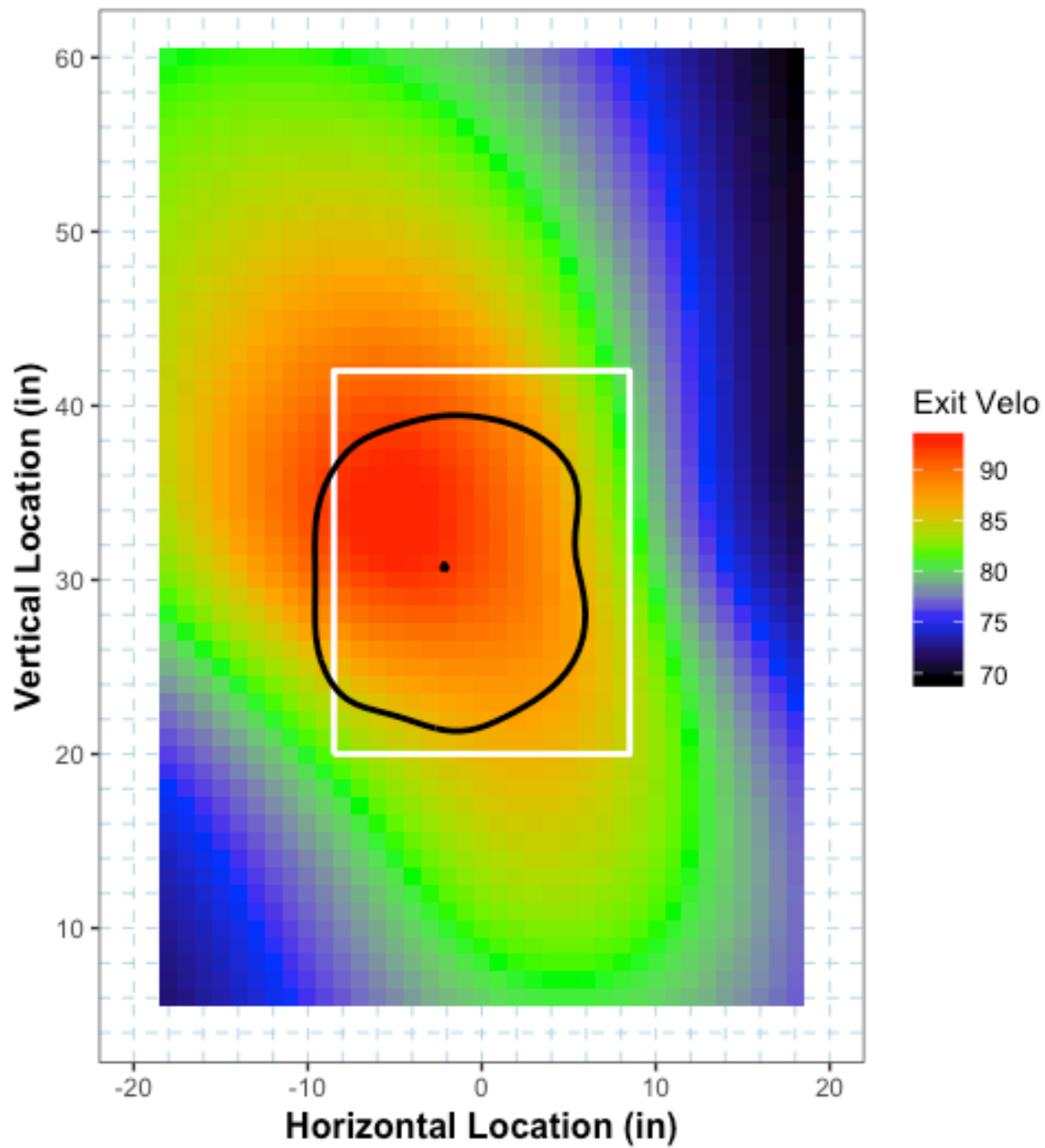
Plate Discipline Statistics (Fall 2018 - Spring 2019)

All Pitches							
	C	J	K	M	O	W	UCSB
O Swing	26%	21%	22%	31%	20%	28%	25%
Z Swing	69%	59%	58%	71%	60%	68%	66%
Swing	47%	39%	40%	50%	40%	46%	44%
O Contact	12%	13%	14%	18%	13%	11%	13%
Z Contact	59%	49%	50%	59%	49%	53%	52%
Contact	35%	30%	32%	37%	30%	31%	32%
Zone	48%	48%	50%	48%	48%	47%	48%
Whiff	11%	7%	7%	11%	8%	14%	11%

Fastballs							
	C	J	K	M	O	W	UCSB
O Swing	24%	22%	21%	29%	18%	24%	23%
Z Swing	71%	63%	64%	74%	65%	73%	68%
Swing	49%	43%	43%	50%	42%	49%	45%
O Contact	15%	17%	15%	19%	13%	14%	14%
Z Contact	62%	54%	57%	63%	53%	59%	55%
Contact	41%	36%	37%	40%	33%	36%	35%
Zone	55%	50%	52%	48%	51%	50%	49%
Whiff	8%	5%	6%	8%	8%	12%	9%

Breaking Balls							
	C	J	K	M	O	W	UCSB
O Swing	28%	20%	23%	35%	24%	31%	27%
Z Swing	67%	49%	45%	68%	46%	58%	62%
Swing	44%	33%	34%	51%	34%	43%	42%
O Contact	9%	7%	11%	15%	13%	8%	11%
Z Contact	54%	38%	36%	52%	39%	44%	47%
Contact	28%	21%	23%	32%	24%	23%	27%
Zone	41%	45%	47%	48%	43%	43%	45%
Whiff	15%	10%	8%	16%	8%	17%	14%

: All Pitches Exit Velo



~~M~~: All Pitches Exit Velo

