Classification Report precision recall f1-score support 0.54 0.59 0.36 0.57 0.38 123 97 0 1 0.41 accuracy macro avg weighted avg 0.49 220 0.48 0.48 220 0.48 0.49 0.48 0.49 220 Accuracy Accuracy: 0.4909090909090909 Optimal Win Ranges Summary for Long Trades Empty DataFrame Columns: [] Index: []

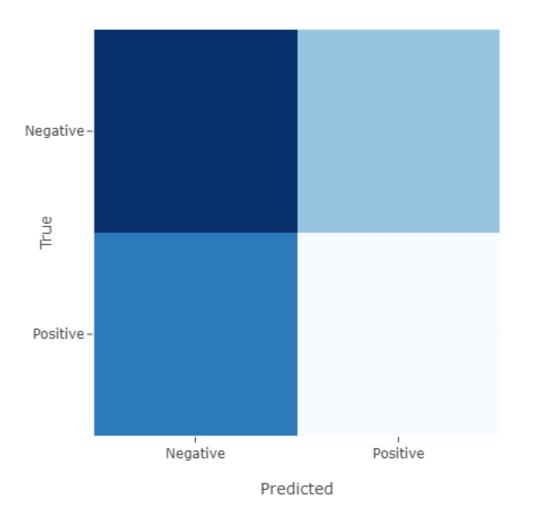
Optimal Win	Ranges Summary f	or Short T	rades	
0 144_SM	eature trade_type⊂c A_percent_away A_percent_away	optimal_wi SE SE	n_range_start op -3.161652 1.367308	otimal_win_range_end -0.621932 3.087562
2 3 4	MFI SE			310781
	VROC SE			789506 0.673771
5 6 7	VROC SE VROC SE			2.194195
б 7	VROC SE VROC SE			3.394530 6.419374
8	VROC SE			7.251606
	M_DI_PLUS SI M DI PLUS S	E SE	-3.428033 1.070583	-1.803533 3.511498
11 D	M_DI_PLUS S	SE .	4.836090	4.894405
	6_percent_away 6_percent_away	SE SE	-2.577919 0.860316	-1.960676 2.239467
14 APZ_UP	PER_percent_away	, SE	-3.6065	47 -1.586892
15 APZ_UP 16 APZ UP	PER_percent_away PER_percent_away	SE SE	-0.71470 1.01800	
17 62_ZLEI	MA_percent_away	SE	-2.465033	3 -1.143914
	MA_percent_away MA_percent_away	SE SE	0.305958 2.836237	
20	ÄDX SE		300359 - ⁻	1.109985
21 22	ADX SE ADX SE			0.145834 1.119230
23	ADX SE			1.834590
	1A_percent_away	SE SE	-3.295275 -2.734759	
	IA_percent_away IA_percent_away	SE	0.628336	
	1A_percent_away	SE SE	1.583761	3.067854
	DLUME_DOWN DLUME DOWN	SE	-0.577276 2.038612	-0.011480 3.743347
	DLUME_DOWN	SE	4.500191	5.102727
31 V	DLUME_DOWN	SE	6.542934	6.763374

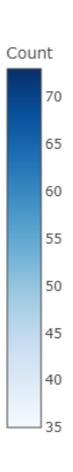
Optir	mal Win Ranges Summary for feature trade_type op	Both Long and Sh	ort Trades	al win range end
0	144_SMA_percent_away 144_SMA_percent_away	-3.161	652 308	-0.621932 3.087562
2 3 4 5 6 7	MFI MFI	-2.425629	-2.31078	31
3 1	VROC	-0.280063 -0.222479	2.78950 0.673	
1 5	VROC	1.626037	2.194	
6	VROC	2.682331	3.394	
7	VROC	4.994976	6.4193	
8	VROC	7.059552	7.2516	
9	DM_DI_PLUS	-3.428033	-1.	803533
10	DM_DI_PLUS	1.070583		.511498
11	DM_DI_PLUS	4.836090		.894405
12	CPR6_percent_away	-2.577		-1.960676
13	CPR6_percent_away	0.860		2.239467
14 A	APZ_UPPER_percent_away		606547	-1.586892
	APZ_UPPER_percent_away		714768	0.088503
	APZ_UPPER_percent_away 62_ZLEMA_percent_away		18003 5033	7.604832 -1.143914
	62_ZLEMA_percent_away 62_ZLEMA_percent_away	_	5958	2.405194
	62_ZLEMA_percent_away		6237	3.127331
20	ADX	-1.300359	-1.1099	
21	ADX	-0.471312	-0.1458	
22	ADX	0.824458	1.1192	
23	ADX	2.488693	4.8345	90
24	382_EMA_percent_away	-3.295		-3.040495
25	382_EMA_percent_away	-2.734		-0.600977
26	382_EMA_percent_away	0.628		1.048723
27	382_EMA_percent_away	1.583		3.067854
28 29	VOLUME_DOWN VOLUME DOWN	-0.5772 2.0386	-	-0.011480 3.743347
30	VOLUME DOWN	4.5001		5.143347 5.102727
31	VOLUME DOWN	6.5429		6.763374
0 1	. 3231112_531114	0.0420	0.	00007 1

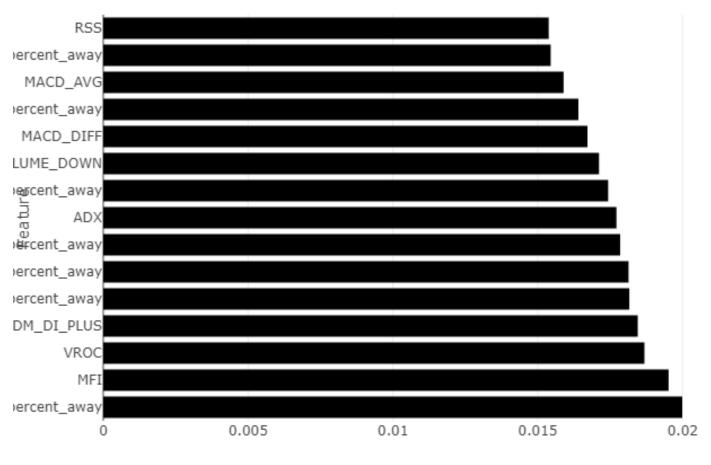
Loss Mitigation Analysis	2011st many otd min 050/ 500/ 750/
ADX	count mean std min 25% 50% 75% max 577.0 -0.045160 0.897373 -1.207930 -0.614572 -0.277868 0.244519 4.294047
AROON DOWN	577.0 0.000000 0.000000 0.000000 0.000000 0.000000
AROON UP	577.0 0.000000 0.000000 0.000000 0.000000 0.000000
ATR	577.0 0.018968 1.010754 -2.440687 -0.772784 -0.158293 0.661027 2.972683
AWESOME	577.0 -0.021330 0.991110 -2.454391 -0.681740 -0.036049 0.561685 1.984944
CCI	577.0 0.005941 0.993115 -1.599027 -1.001094 0.139811 0.732564 2.353140
CHAIKIN	577.0 -0.003597 0.959277 -4.985227 -0.382322 0.102035 0.418541 3.708205
CMO	577.0 -0.035411 1.013506 -2.650823 -0.690839 -0.241272 0.657054 2.559629
DISPARITY_INDEX	577.0 -0.011408 0.974135 -2.424537 -0.639821 0.252536 0.252536 2.9296
DM_ADX_PLOT	577.0 -0.045160 0.897373 -1.207930 -0.614572 -0.277868 0.244519 4.2940
DM_DI_MINUS	577.0 0.038217 0.980847 -3.377797 -0.529773 0.065723 0.723358 3.42121
DM_DI_PLUS	577.0 -0.022904 0.962877 -2.761670 -0.677516 -0.074955 0.633941 4.780982
DYNAMIC_MOMENTUN	
FISHER_TRANSFORM	577.0 -0.020141
LIN_REG_SLOPE MACD AVG	577.0 -0.025928
MACD_AVG MACD_DEFAULT	577.0 -0.010752 0.991004 -2.344837 -0.091059 0.030307 0.019739 2.401984
MACD_DEFAULT	577.0 0.007867 1.000940 -2.095056 -0.696515 -0.104340 0.777622 2.579346
MFI	577.0 -0.082757 0.992337 -2.425629 -0.882009 -0.138229 0.674903 2.424261
MOMENTUM	577.0 -0.039041 1.029725 -3.435090 -0.327107 -0.327107 0.560888 2.33687
PFE	577.0 -0.020244 0.996399 -2.435360 -0.731418 0.161123 0.485684 1.662215
RIND	577.0 0.016449 1.021488 -1.394995 -0.856760 -0.260989 0.718043 3.077000
RSI_AVERAGE	577.0 -0.011023 0.975471 -1.766481 -0.672436 -0.250035 0.581649 2.81434
RSI_DEFAULT	577.0 -0.019866 0.970761 -1.792564 -0.648805 -0.128612 0.851752 2.83248
RSS	577.0 -0.014990 1.011232 -3.428535 -0.726690 0.094683 0.647910 2.378157
RVI	577.0 -0.009895 0.981693 -2.511552 -0.711062 0.070599 0.611279 2.335509
R_SQUARED STOCH FAST D	577.0 -0.000181
STOCH FAST K	577.0 0.004510 1.011195 -1.505444 -0.042292 -0.171297 0.012890 2.5128
TRIX DEFAULT	577.0 -0.039627 0.920870 -0.250862 -0.250862 -0.250862 -0.250862 4.00086
TRIX_SIGNAL	577.0 -0.038534 0.922557 -4.414297 -0.238748 -0.238748 -0.238748 3.936801
VOLŪME	577.0 0.046011 1.035807 -0.577276 -0.531176 -0.445757 0.205058 6.173573
VOLUME_DOWN	577.0 0.046011 1.035807 -0.577276 -0.531176 -0.445757 0.205058 6.173
VOLUME_UP	577.0 0.000000 0.000000 0.000000 0.000000 0.000000
VORTEX_MINUS	577.0 0.000970 0.992842 -2.873855 -0.795315 -0.201446 0.392423 3.3617
VORTEX_PLUS	577.0 -0.016028 1.010693 -2.545418 -0.706417 0.213083 0.672834 2.05208
VROC	577.0 -0.002071
WILLIAMS_%R DIV BULL	577.0 0.000000 0.000000 0.000000 0.000000 0.000000
DIV_BOLL DIV_BEAR	577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CHOP INDEX	
AROON UP	577.0 -0.043393 1.033385 -2.529763 0.245041 0.497199 0.497199 1.001870
AROON_DOWN	577.0 0.022547 1.011705 -0.975000 -0.975000 -0.196877 0.840499 2.3967
ACCUM_DIST	577.0 0.000000 0.000000 0.000000 0.000000 0.000000
OBV	577.0 0.000000 0.000000 0.000000 0.000000 0.000000
WILLIAMSR	577.0 0.000151 0.983436 -1.557980 -0.618692 -0.010202 0.823983 2.195851
CHANDE_CMO TSI	577.0 0.000000 0.000000 0.000000 0.000000 0.000000
	ay 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
	y 577.0 0.027510 0.370679 -2.020037 -0.306170 0.023307 0.714102 2.33
	S_LOWER_percent_away 577.0 -0.035861 0.974686 -3.113963 -0.812786 -0.187915 0
14_P_MA_ENVELOPES	S_MID_percent_away 577.0 -0.035861 0.974690 -3.115049 -0.811569 -0.188451 0.78
14_P_MA_ENVELOPES	S_UPPER_percent_away 577.0 -0.035934 0.974651 -3.116061 -0.814342 -0.186204 0
236_EMA_percent_away	y 577.0 0.011530 0.951757 -2.882466 -0.581137 0.025999 0.643334 3.28
	y 577.0 0.017171 0.958051 -2.893082 -0.538083 0.065143 0.635821 3.06
62 7 FMA percent_away	y 577.0 0.020681 0.965074 -2.694009 -0.534439 0.047748 0.675711 2.51
oz_zlenia_percent_awa	ay 577.0 -0.018542 0.968321 -2.327425 -0.709848 0.022805 0.708228 2.60 y 577.0 -0.027346 1.000855 -2.431457 -0.739178 0.142774 0.883583 2.36
8_ZLEMA_percent_away	y 377.U-U.U2734U 1.UUUOOO -2.431407-U.739170 U.142774 U.883383 2.30 away 577 N -0 025563 1 021501 -1 630177 -1 122775 0 117767 0 528720 -2
AP7 I OW percent awa	away 577.0 -0.025563 1.021591 -1.639144 -1.122445 0.114464 0.538730 2 ay 577.0 -0.051493 0.941283 -4.399477 -0.659990 -0.170972 0.456186 5.5
APZ_UPPER_percent_a	way $577.0 \cdot 0.031493 \cdot 0.941283 \cdot 4.399477 \cdot 0.039990 \cdot 0.170972 \cdot 0.430180 \cdot 3.3189999 \cdot 0.170972 \cdot 0.430180 \cdot 3.3189999 \cdot 0.170972 \cdot 0.430180 \cdot 3.3189999 \cdot 0.170972 \cdot 0.430180 \cdot 3.31899999 \cdot 0.170972 \cdot 0.430180 \cdot 3.31899999999999999999999999999999999999$
BOLLI_500_P_LOWER	
BOLLI_500_P_MID_per	=1 = 7
	= ;

Lace Mitigation Analysis
I I nee Milination Analysis
Loss Mitigation Analysis BOLLI_500_P_UPPER_percent_away
CP+_C_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CP+_R1_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CP+_R2_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CP+_R3_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CP+_R4_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CP+_R5_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CP+_R6_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CP+_S1_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CP+_S2_percent_away 577.0 0.0000000 0.0000000 0.0000000 0.000000
CP+_S3_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CP+_S4_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CP+_S5_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CP+_S6_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
LIN_REG_percent_away 577.0 0.004675 0.981274 -2.659256 -0.720447 0.093989 0.649888 3.5
LIN_REG_INTERCEPT_percent_away 577.0 -0.032796 0.989402 -1.904635 -1.020592 -0.273188 0.9143
OBV_percent_away 577.0 -0.026473 1.022014 -1.651545 -1.123844 0.144497 0.550280 2.339
VROC_percent_away 577.0 -0.047008 1.261289 -19.504584 0.026604 0.026604 0.026604 10.6
VWAP_percent_away 577.0 0.018548 0.947845 -3.771310 -0.331753 0.079158 0.496206 3.23
VWAP_CLOUD_HIGH_percent_away 577.0 0.010340 0.947043 -0.771510 -0.0331733 0.073130 0.430200 0.523
VWAP_CLOUD_LOW_percent_away 577.0 0.039142 0.947230 -4.904169 -0.093442 0.479039 0.0112
VWAP_CLOOD_LOW_percent_away
VWAP_L1_percent_away 577.0 0.008631 0.940970 -2.443904 -0.326169 -0.164146 0.439427 3.6
VWAP_U1_percent_away 577.0 0.024418 0.957859 -4.468947 -0.373869 0.276693 0.585204 2.4
VWAP_U2_percent_away 577.0 0.026984 0.964860 -4.671259 -0.348359 0.368834 0.630414 1.0
ZIGZAG_HIGH_percent_away 577.0 -0.026272 0.963712 -3.754297 -0.652467 -0.158528 0.614730
ZIGZAG_LOW_percent_away 577.0 -0.046511 0.904825 -0.950179 -0.486126 -0.292055 0.024550
VOLUME_UP_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CPR6_percent_away 577.0 -0.040338 0.983710 -2.577919 -0.718755 -0.095648 0.740898 2.23
CPS6_percent_away 577.0 0.033920 1.012668 -2.164926 -0.883260 -0.054810 0.837154 2.63
CHAIKIN_percent_away 577.0 0.0000000 0.0000000 0.0000000 0.000000
BOLLI_500_UPPER_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CPS3_percent_away 577.0 0.009907 0.982523 -2.701189 -0.544520 0.040836 0.620053 2.52
BOLLI_500_LOWER_percent_away 577.0 0.0000000 0.0000000 0.0000000 0.000000
14_MA_ENVELOPES_UPPER_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
14_MA_ENVELOPES_LOWER_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
14_MA_ENVELOPES_MID_percent_away
CPS2_percent_away 577.0 0.006702 0.978858 -2.771073 -0.491176 0.042777 0.572292 2.44
VOLUME_DOWN_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CP S1 percent away 577 0 0 003292 0 975249 -2 829415 -0 445750 0 040270 0 490954 2 35
CP_R5_percent_away 577.0 -0.032909 0.970649 -2.868416 -0.770344 0.013371 0.700616 2.29
CP_R4_percent_away 577.0 -0.021383 0.963106 -2.920986 -0.643375 0.035147 0.599846 2.49
CPR1_percent_away 577.0 -0.003947 0.968818 -2.900196 -0.434839 0.028485 0.491712 2.37
CPC_percent_away 577.0 -0.0003947 0.900816 -2.900190 -0.434839 0.020483 0.491712 2.37
CP_S5_percent_away 577.0 -0.000270 0.971049 -2.073304 -0.410130 0.044730 0.301330 2.31
CF33_percent_away
BOLLI_500_MID_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CPR3_percent_away 577.0 -0.011316
VOLUME_Percent_away
VOLUME_percent_away 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
CPKZ_percent_away 5/7.0 -0.007653 0.966311 -2.908288 -0.421281 0.018718 0.490801 2.43
1000_SMA_binary 577.0 0.507799 0.500373 0.000000 0.000000 1.000000 1.000000 1.000000
144_SMA_binary 577.0 0.379549 0.485696 0.000000 0.000000 0.000000 1.000000 1.00000
14_P_MA_ENVELOPES_LOWER_binary
14_P_MA_ENVELOPES_MID_binary 577.0 0.001733 0.041631 0.000000 0.000000 0.000000 0.00000
14_P_MA_ENVELOPES_UPPER_binary 577.0 0.0000000 0.0000000 0.0000000 0.000000
236_EMA_binary 577.0 0.441941 0.497049 0.000000 0.000000 0.000000 1.000000 1.00000
382_EMA_binary 577.0 0.493934 0.500397 0.000000 0.000000 0.000000 1.000000 1.00000
236_EMA_binary
62 ZLEMA binary 577.0 0.168111 0.374289 0.000000 0.000000 0.000000 1.0000
8 ZLEMA binary 577.0 0.296360 0.457048 0.000000 0.000000 1.000000 1.000000
ACCUM DIST binary 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
APZ LOW binary 577.0 0.000000 0.000000 0.000000 0.000000 0.000000
APZ_LOW_binary 577.0 1.000000 0.000000 1.000000 1.000000 1.000000 1.000000 1.000000 0.000000 0.000000 0.000000 0.000000
BOLLI_500_P_LOWER_binary 577.0 0.000000 0.000000 0.000000 0.000000 0.000000

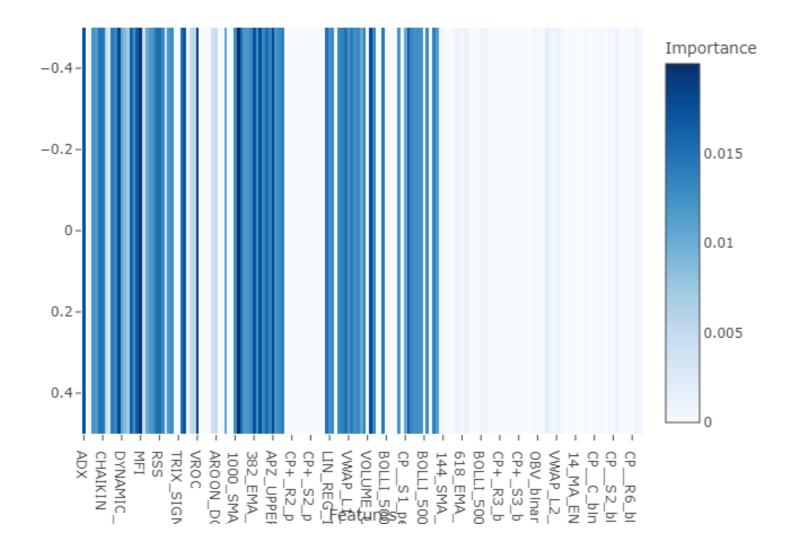
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| Loss Mitigation Analysis | BOLLI_500_P_MID_binary | 577.0 0.506066 0.500397 0.000000 0.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.000000 1.0000
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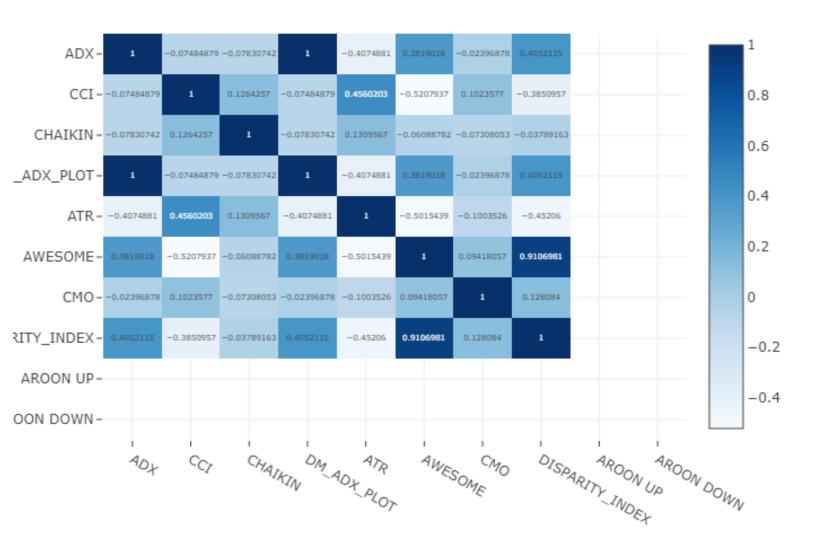




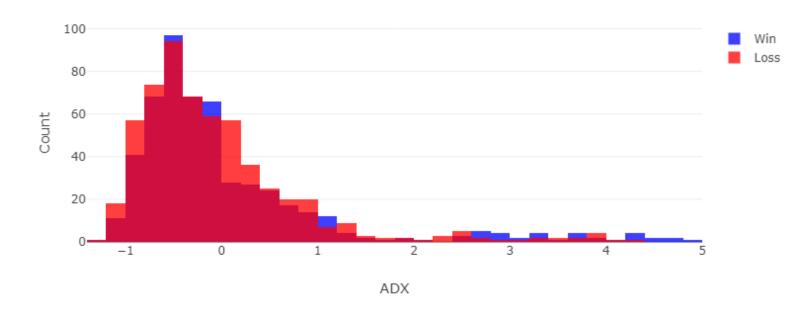


Importance

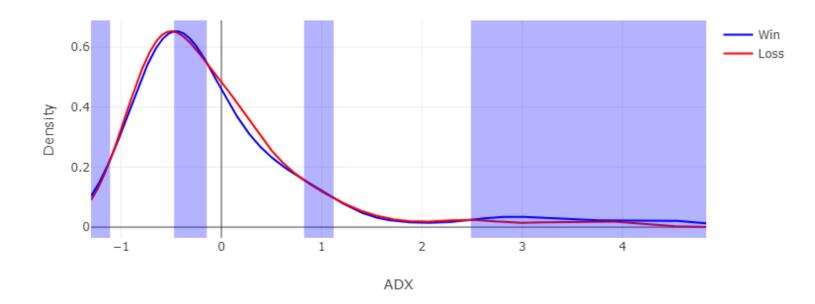




Distribution of ADX for Winning and Losing Trades



KDE Plot with Optimal Win Ranges for ADX



Mean Indicator Values for Losses

