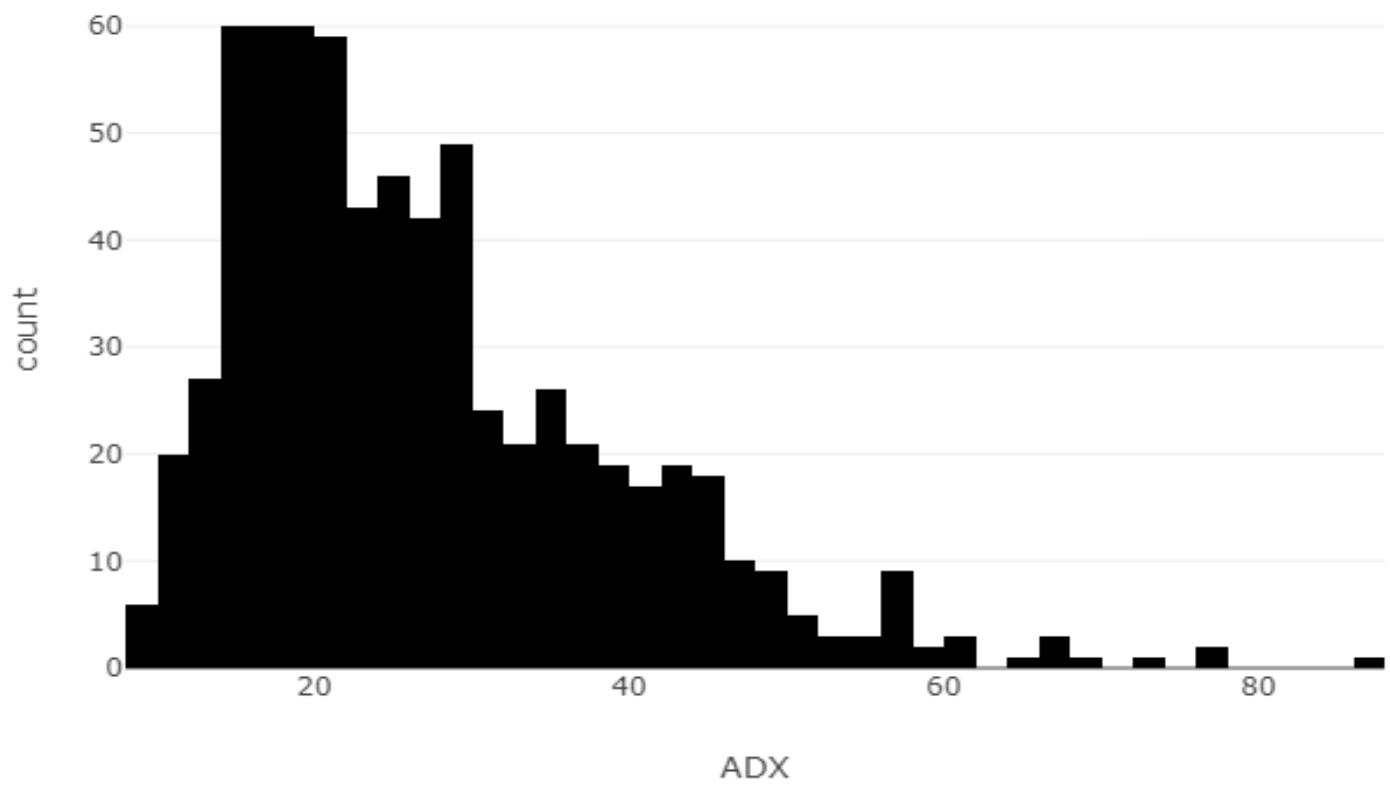
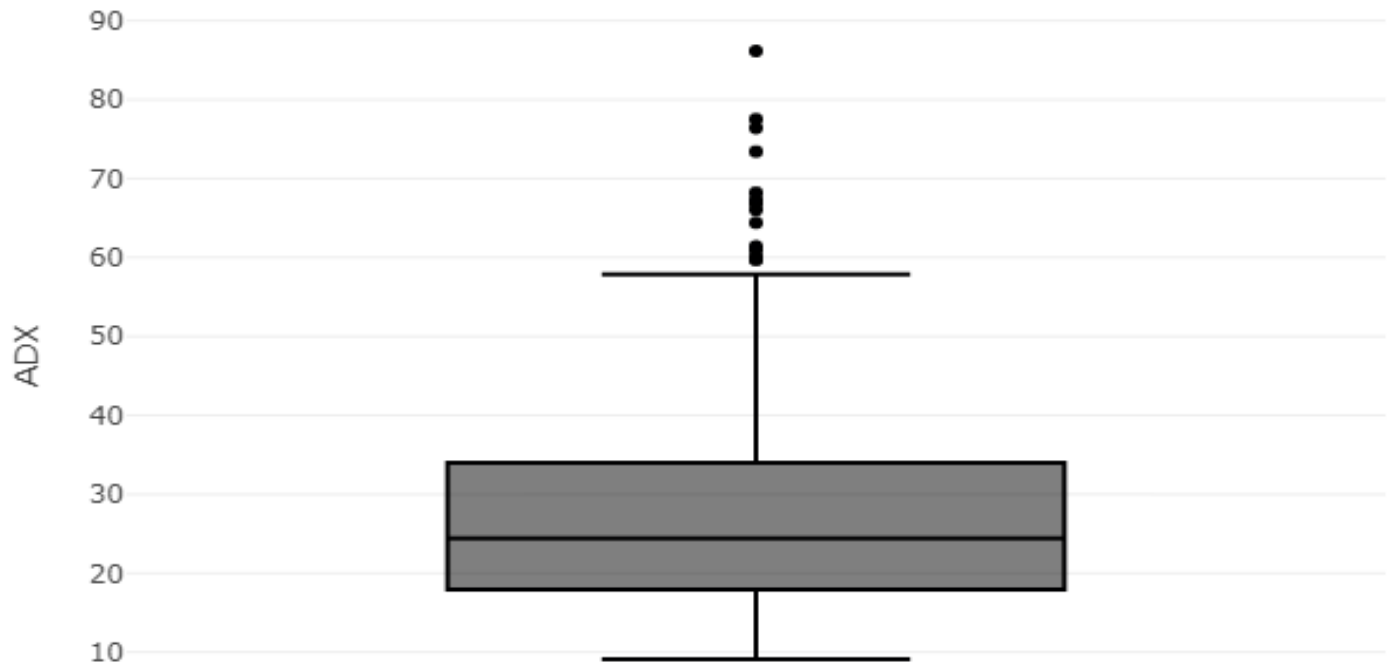


Histogram of ADX



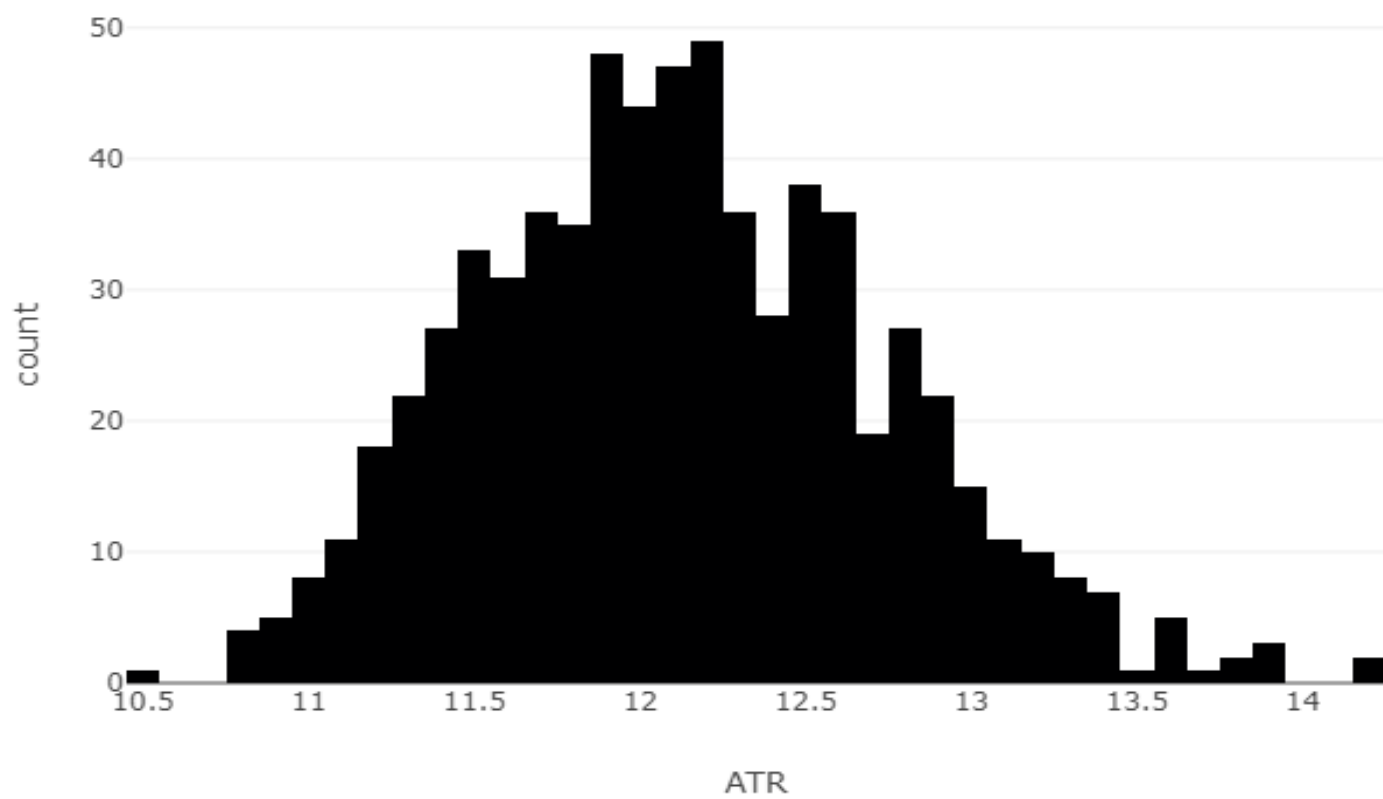
Histogram of ADX

Box Plot of ADX



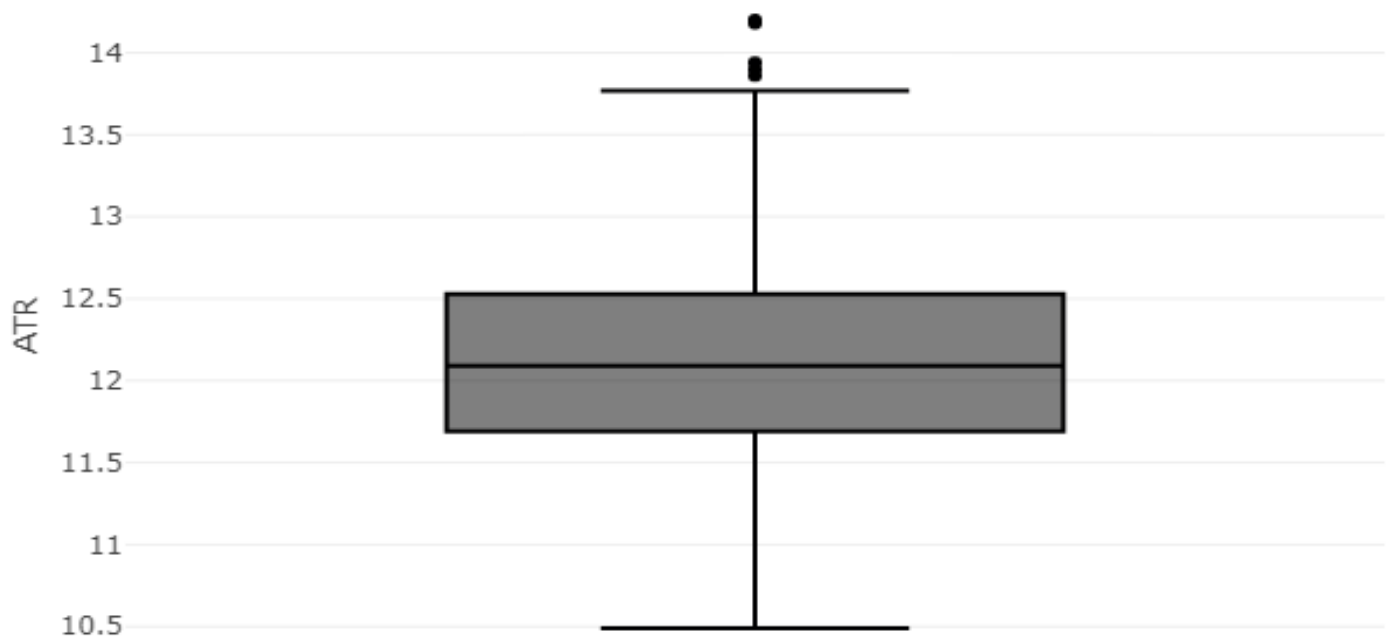
Box Plot of ADX

Histogram of ATR



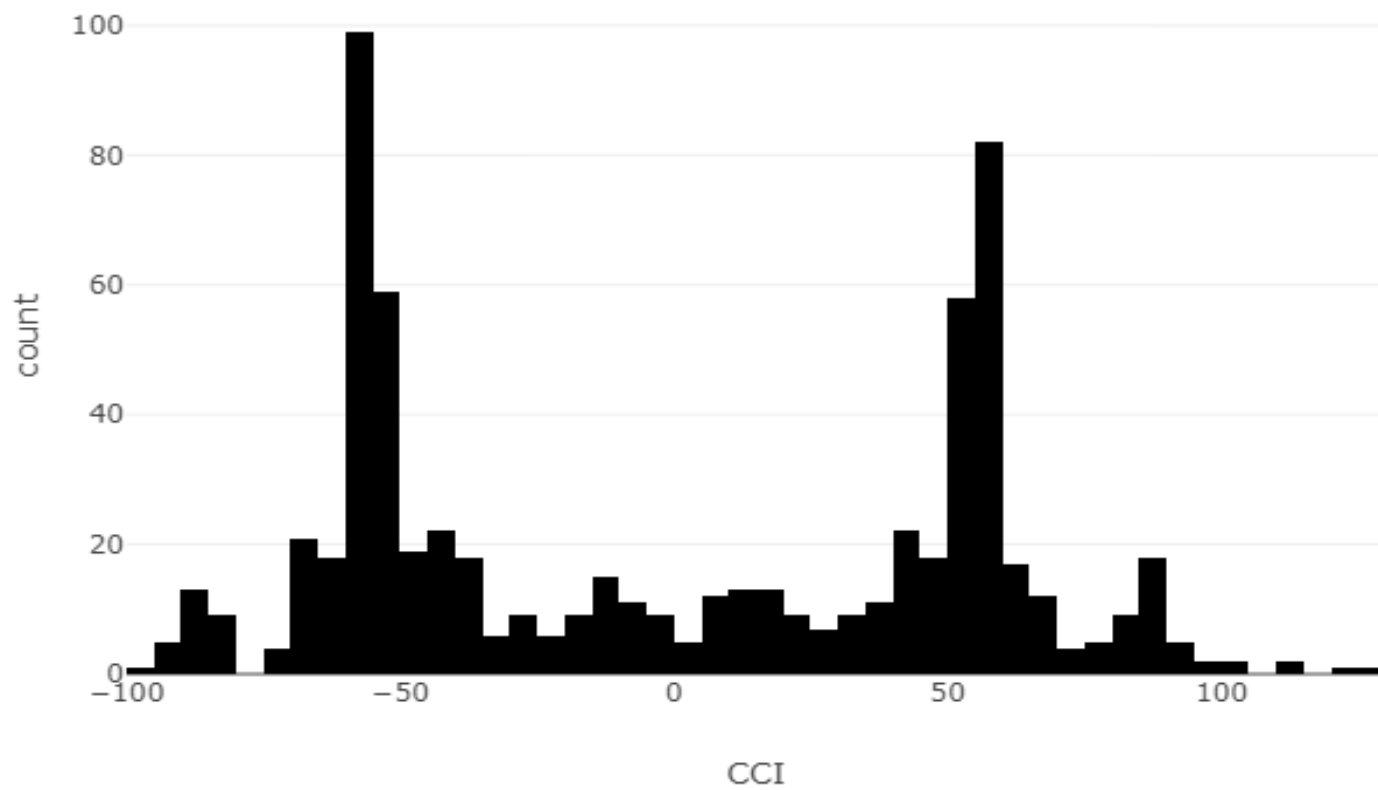
Histogram of ATR

Box Plot of ATR



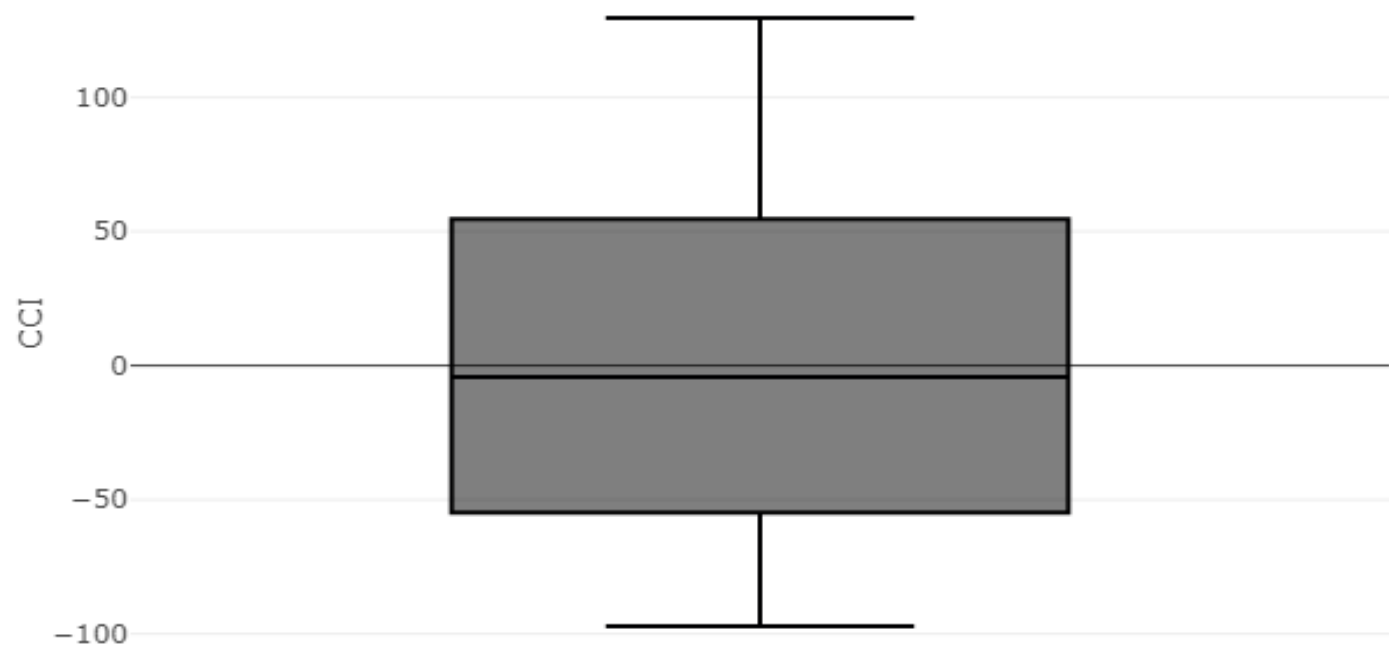
Box Plot of ATR

Histogram of CCI



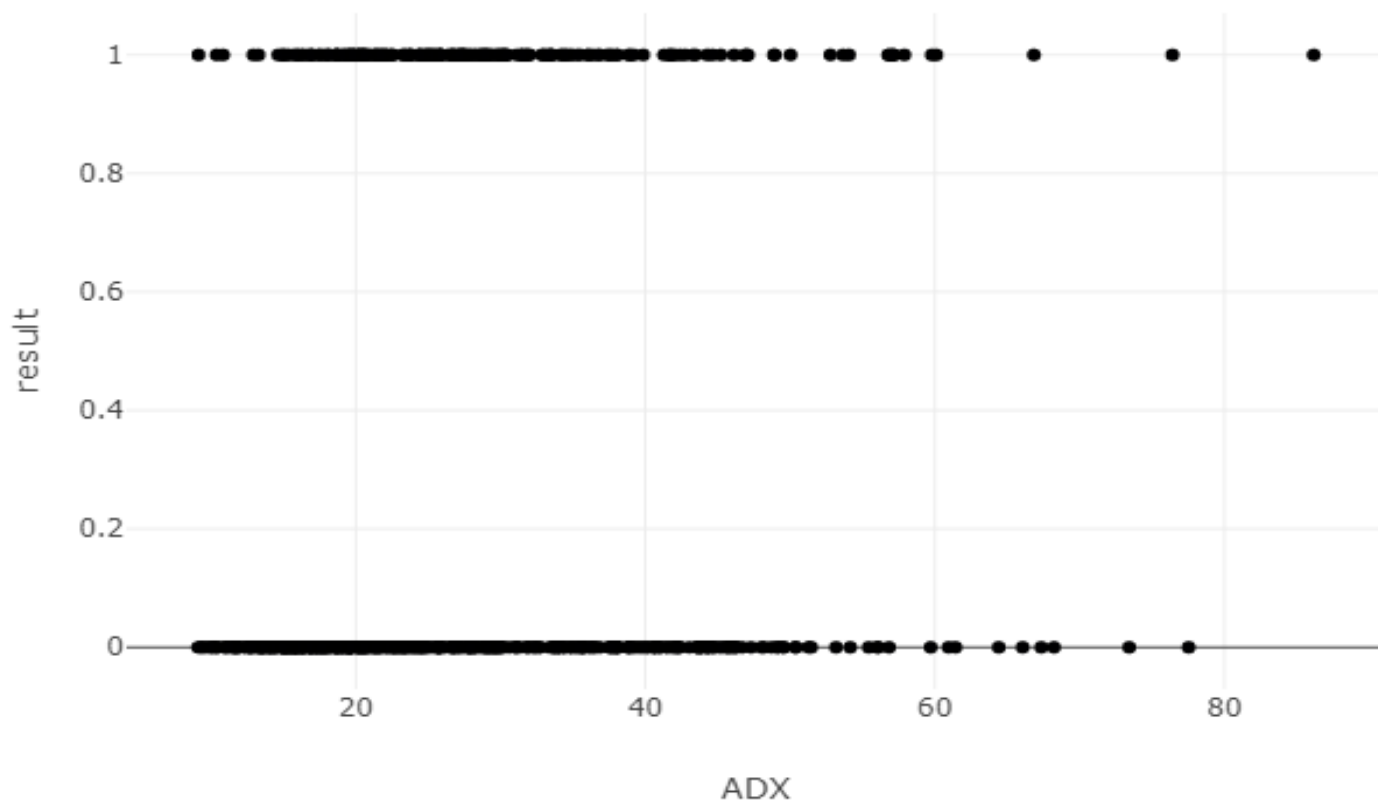
Histogram of CCI

Box Plot of CCI



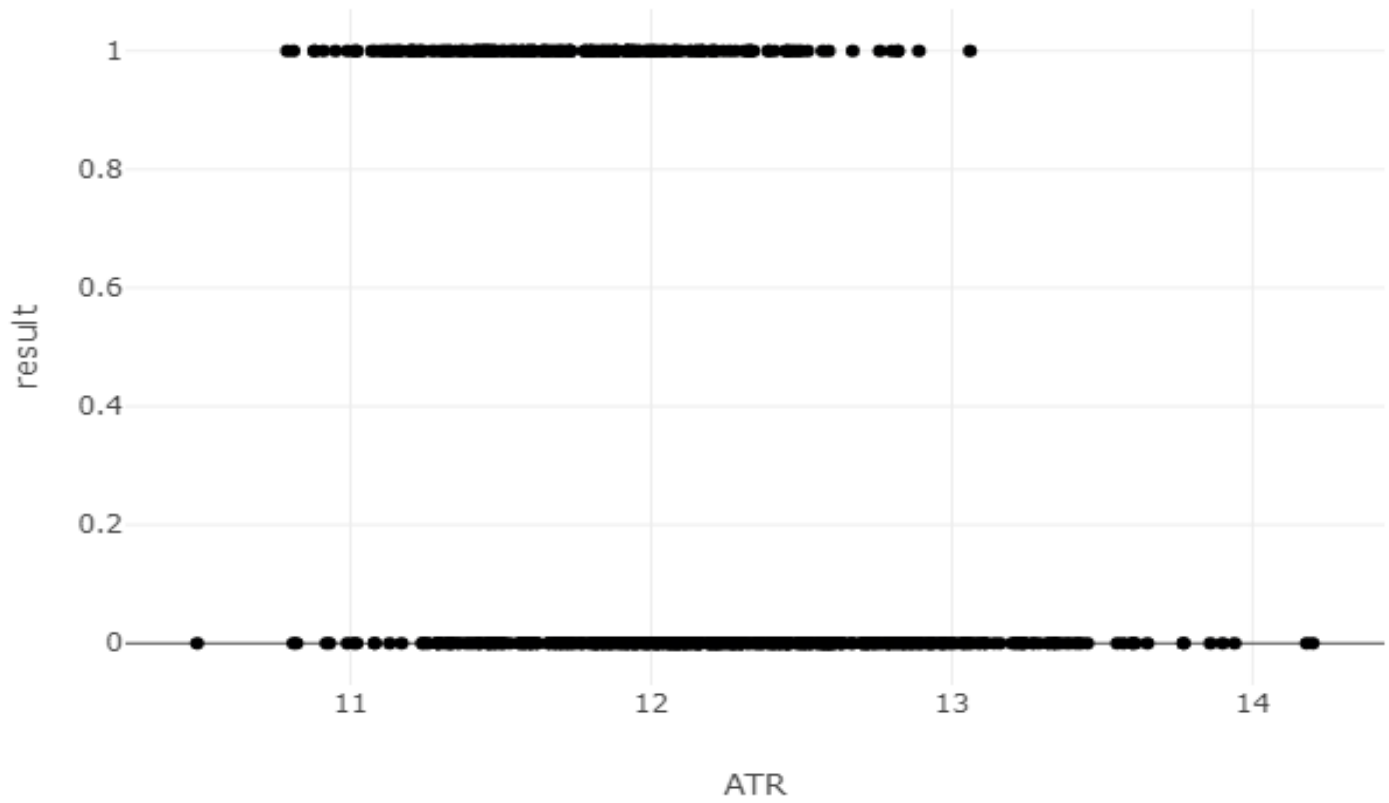
Box Plot of CCI

Scatter Plot of ADX vs result



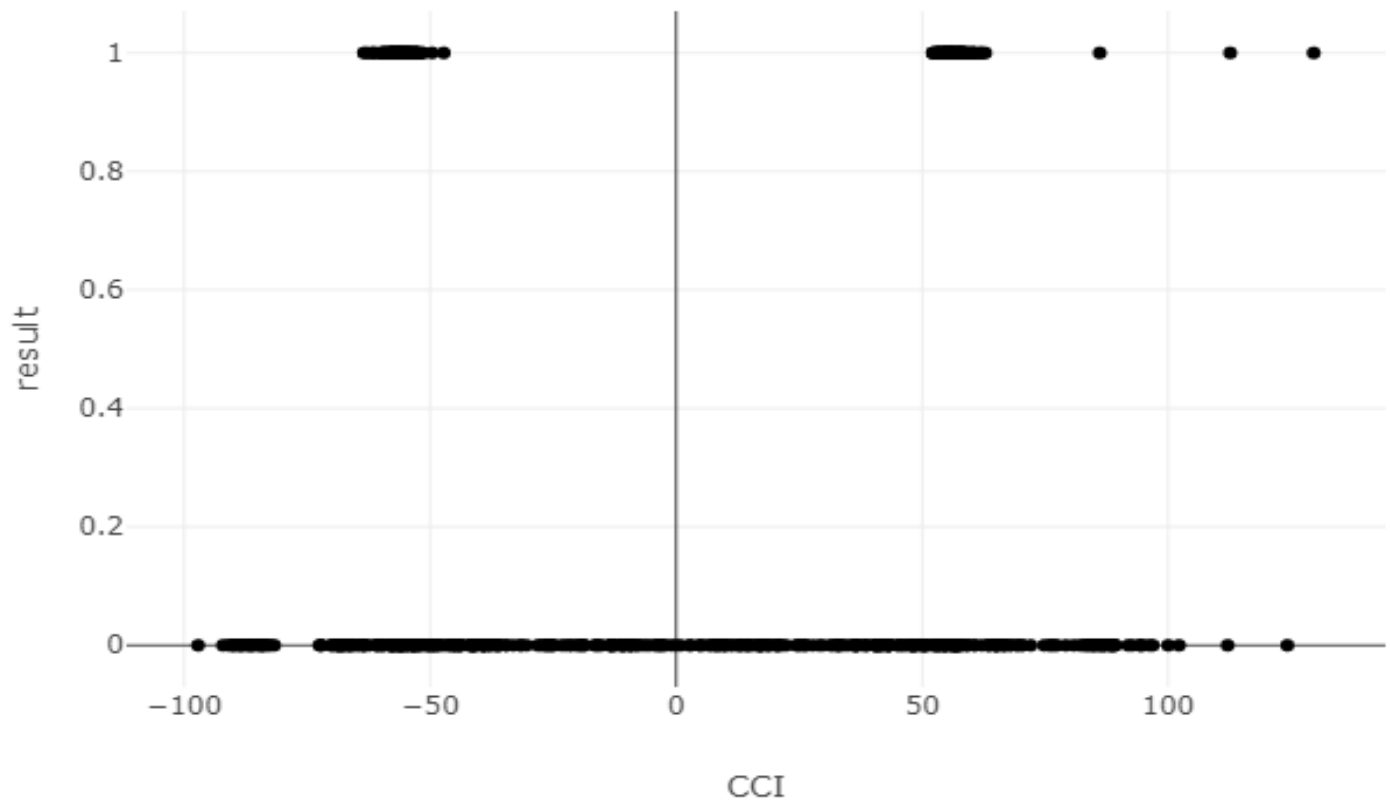
Scatter Plot of ADX vs result

Scatter Plot of ATR vs result



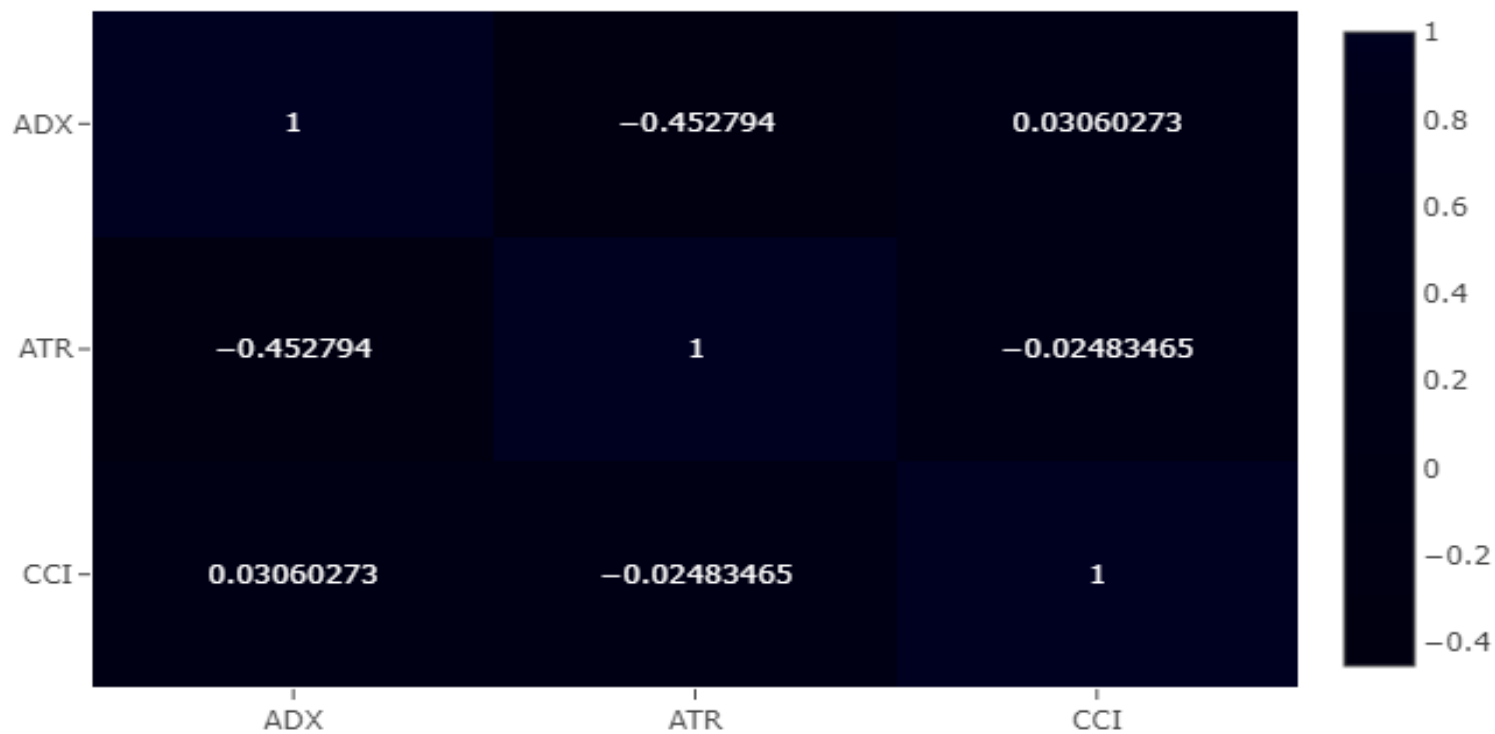
Scatter Plot of ATR vs result

Scatter Plot of CCI vs result



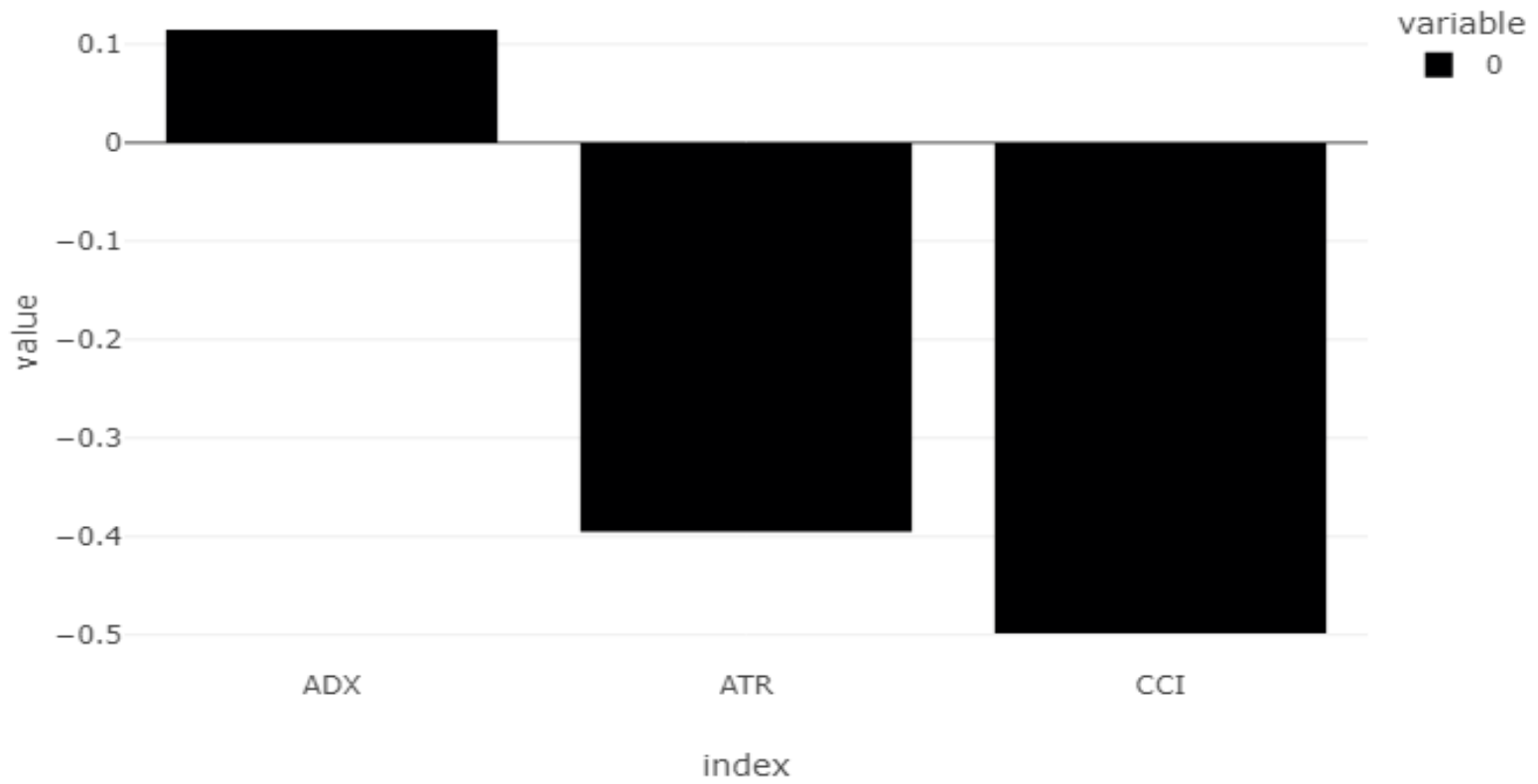
Scatter Plot of CCI vs result

Correlation Matrix



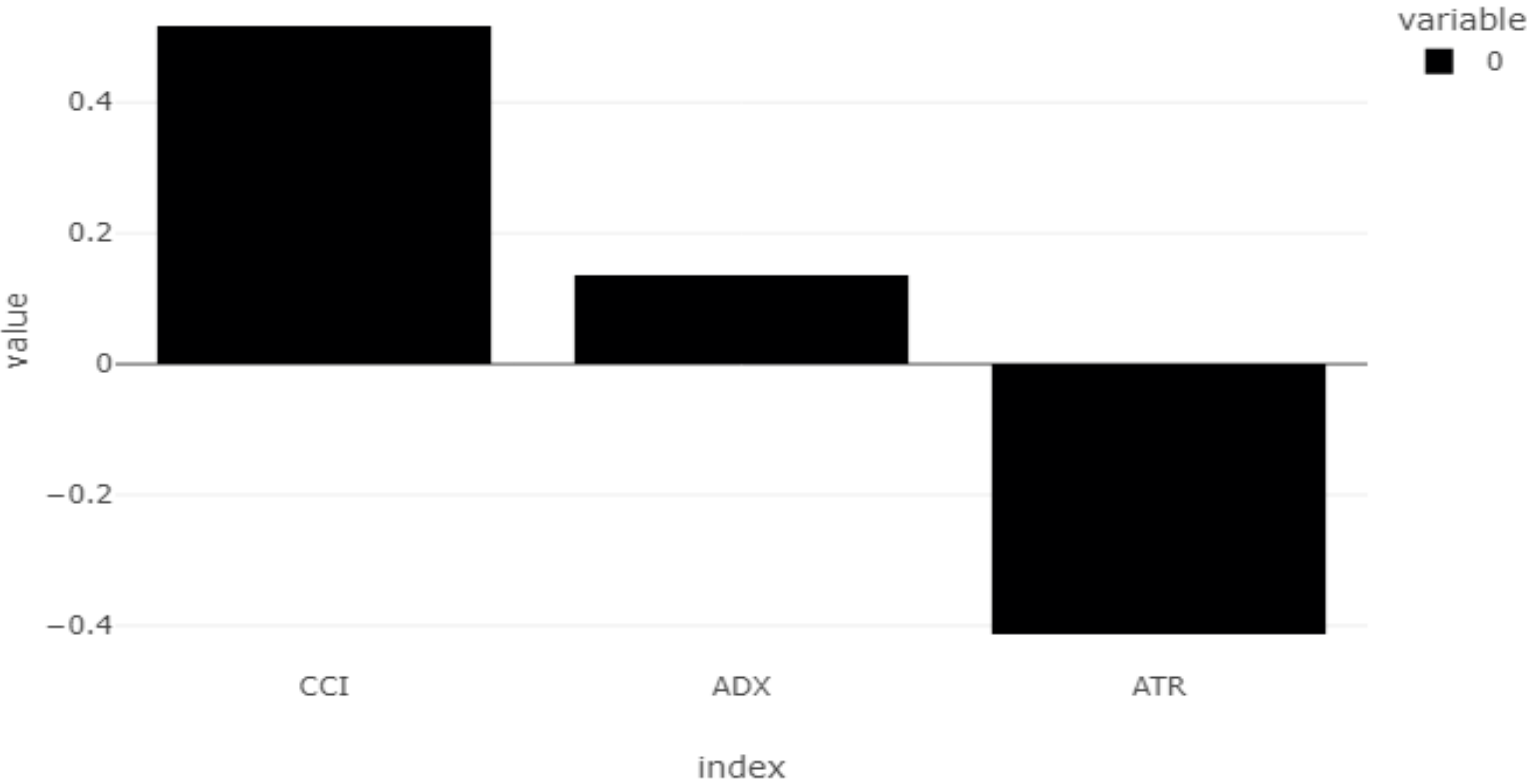
Correlation Matrix

Correlation with Target Variable (Long Trades)



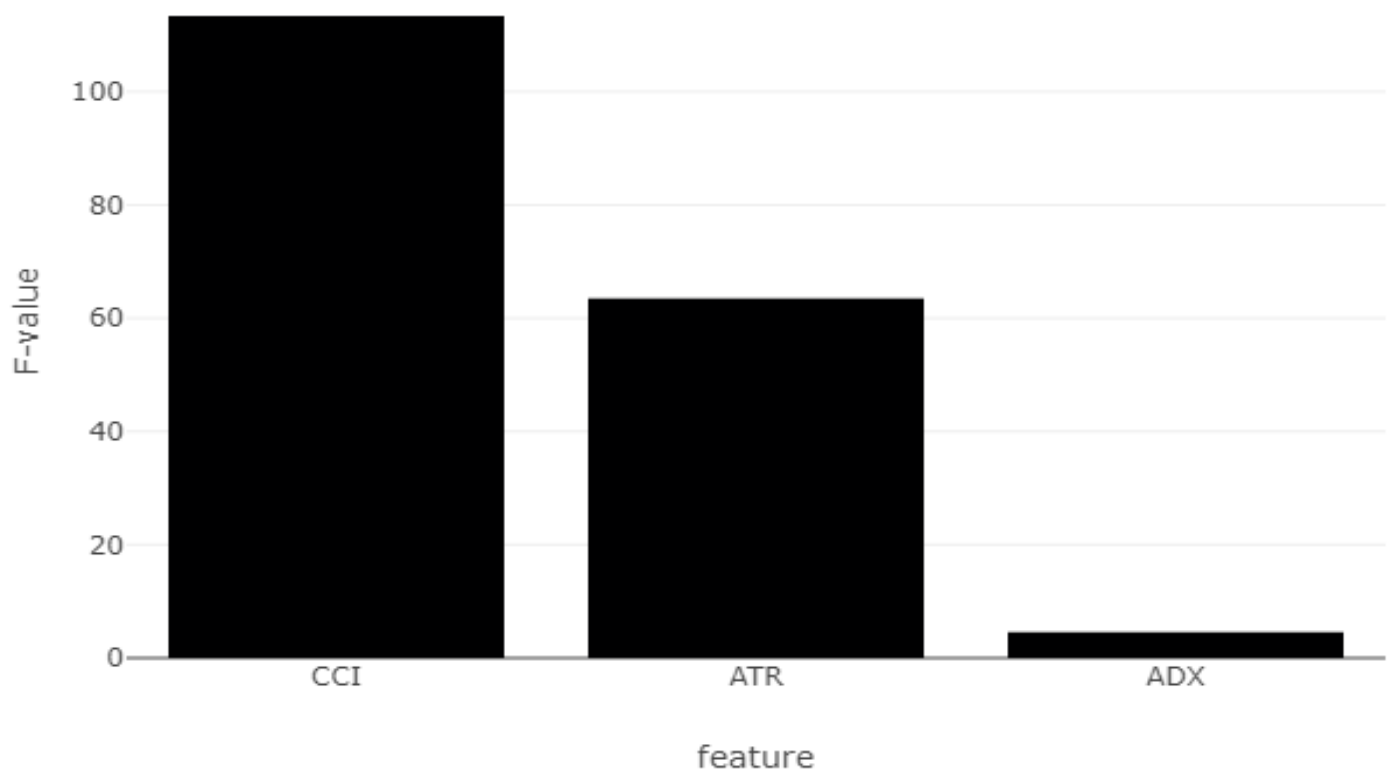
Correlation with Target Variable (Long Trades)

Correlation with Target Variable (Short Trades)



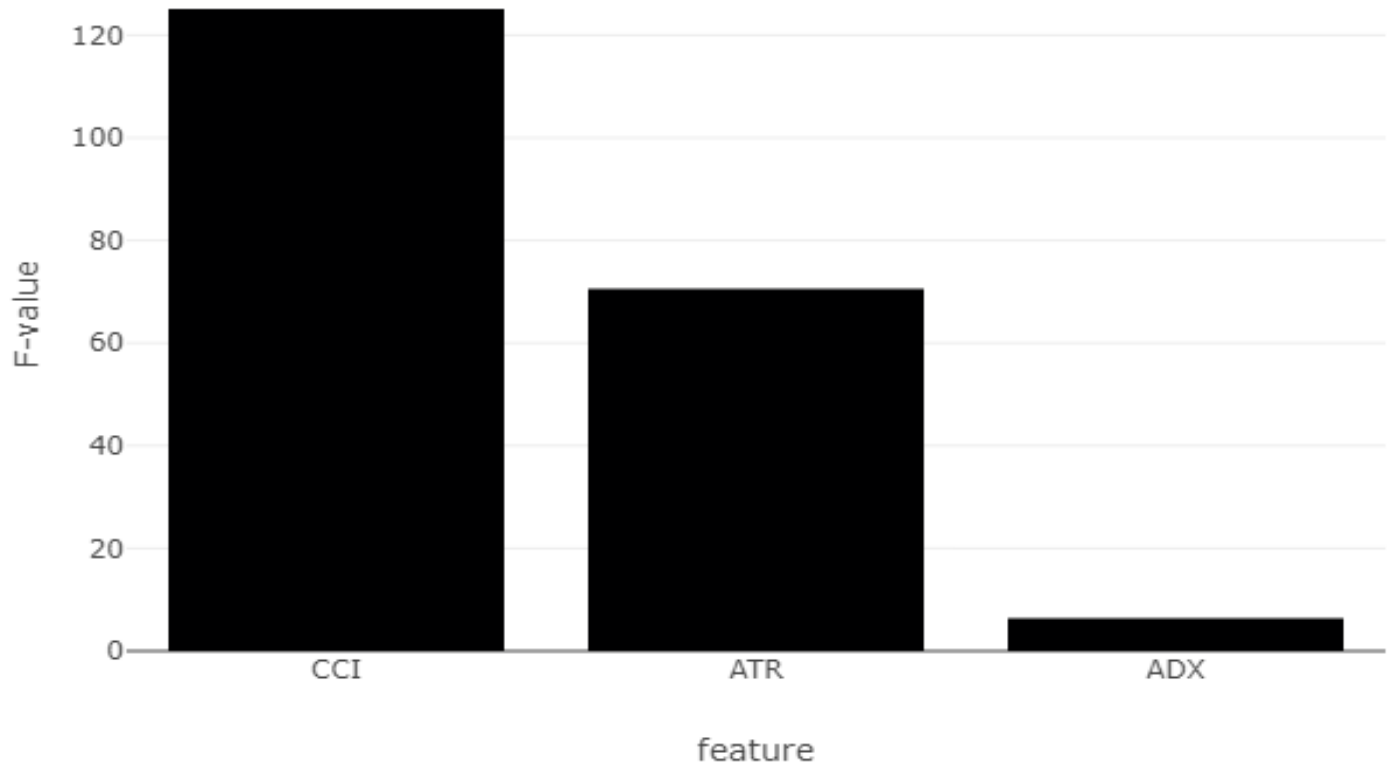
Correlation with Target Variable (Short Trades)

ANOVA F-Test Scores (Long Trades)



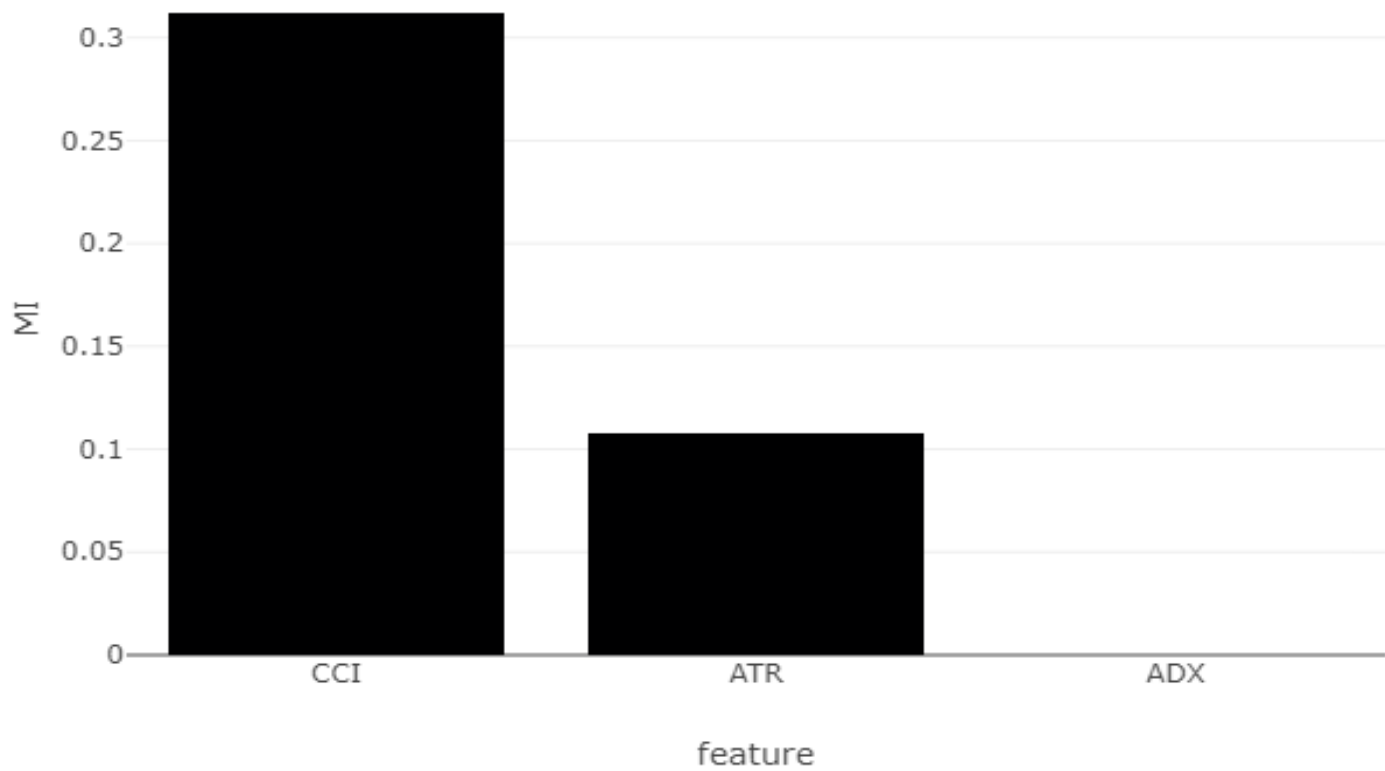
ANOVA F-Test Scores (Long Trades)

ANOVA F-Test Scores (Short Trades)



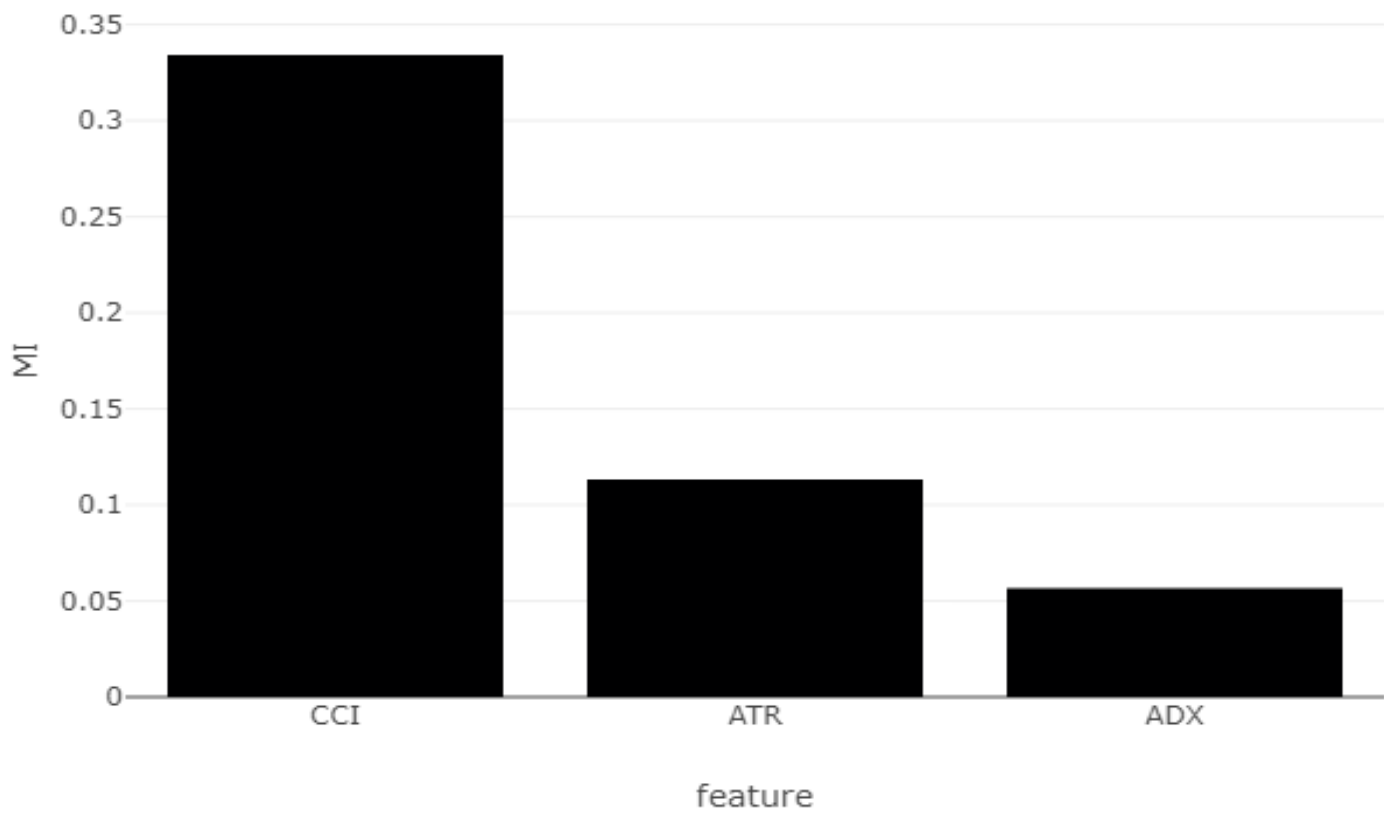
ANOVA F-Test Scores (Short Trades)

Mutual Information Scores (Long Trades)



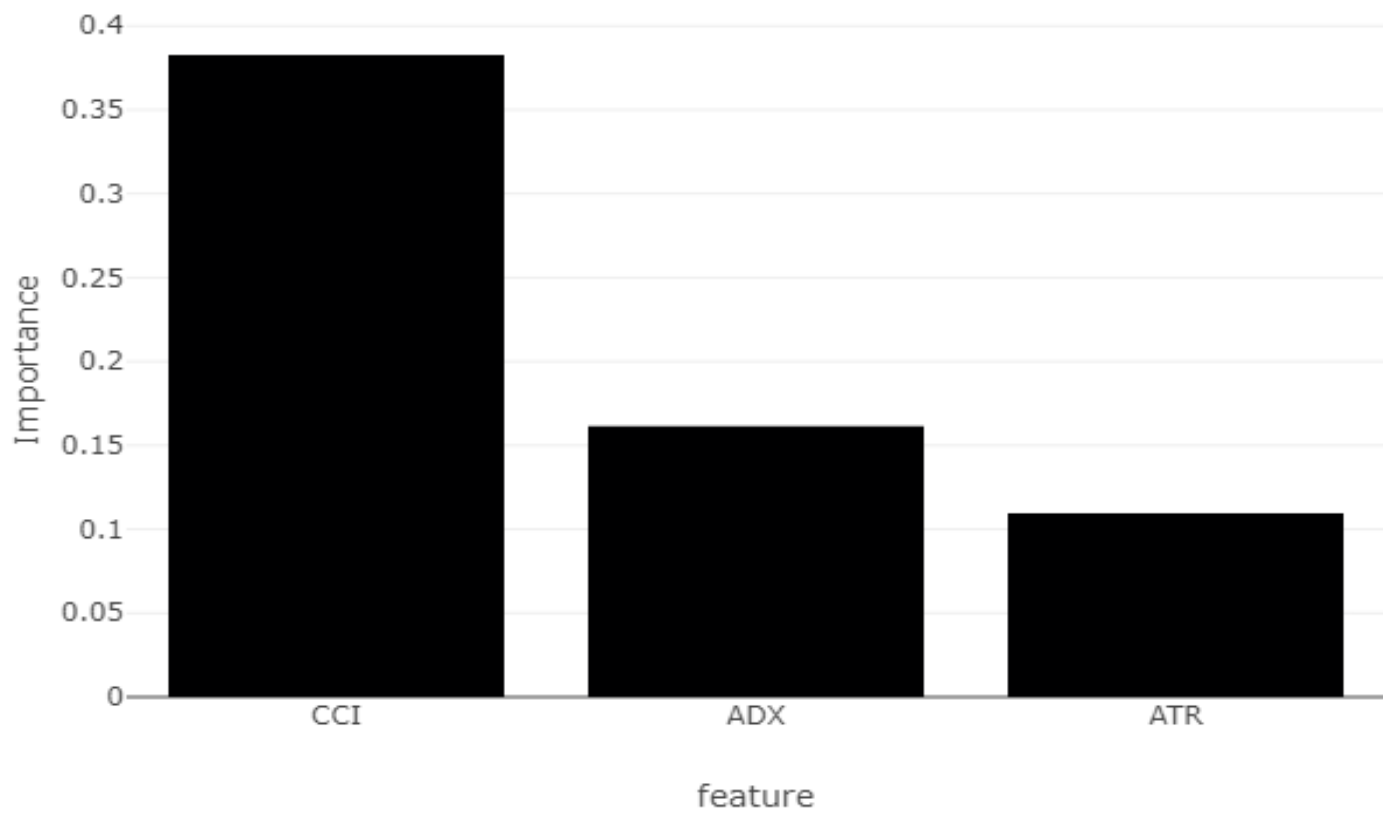
Mutual Information Scores (Long Trades)

Mutual Information Scores (Short Trades)



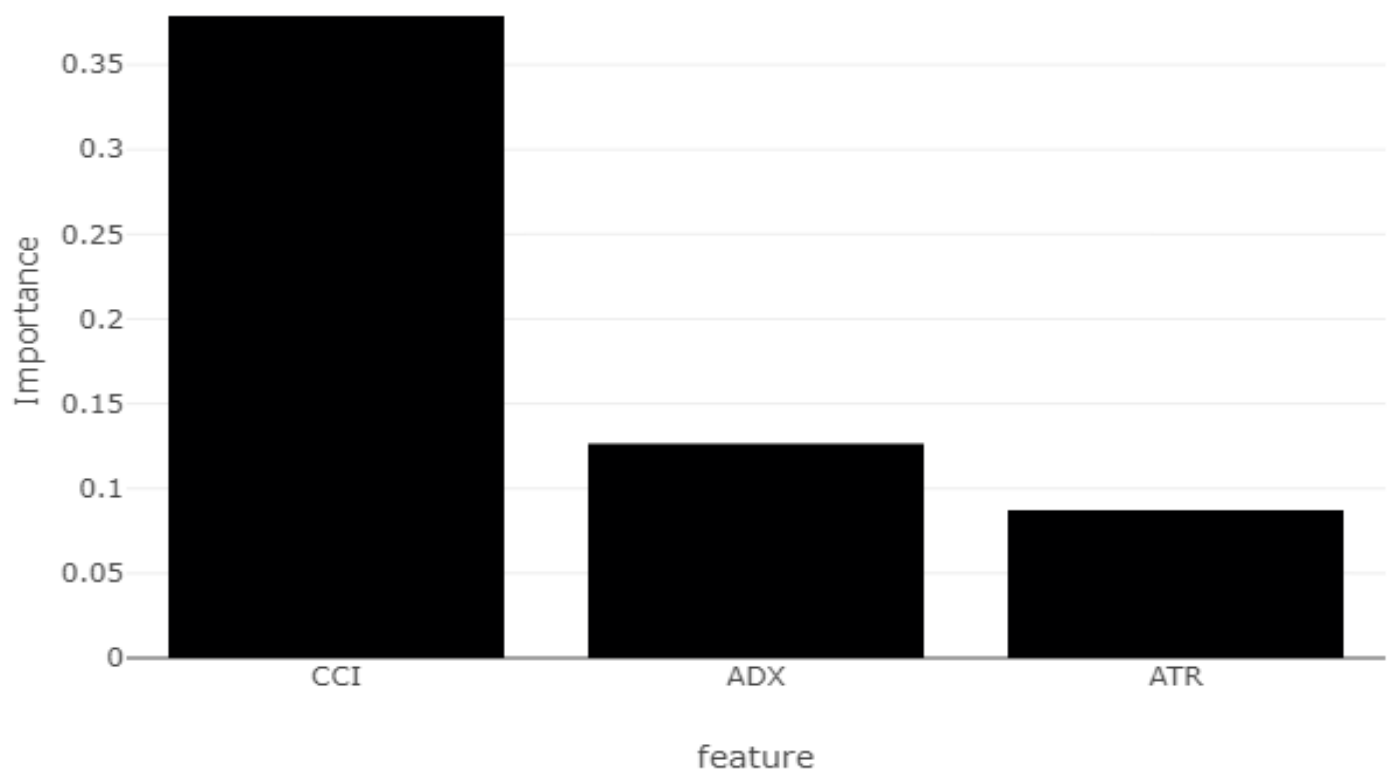
Mutual Information Scores (Short Trades)

Permutation Importance Scores (Long Trades)



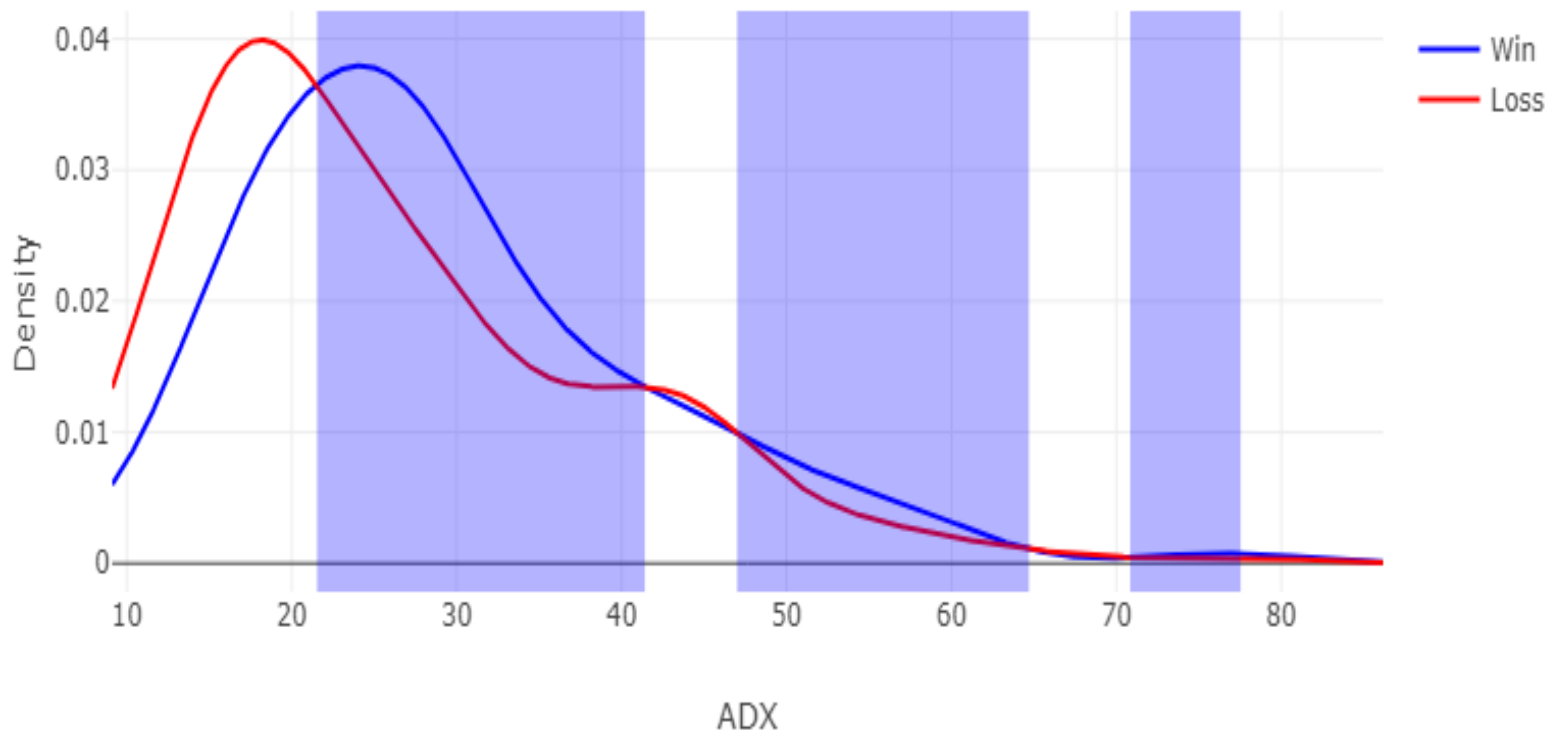
Permutation Importance Scores (Long Trades)

Permutation Importance Scores (Short Trades)



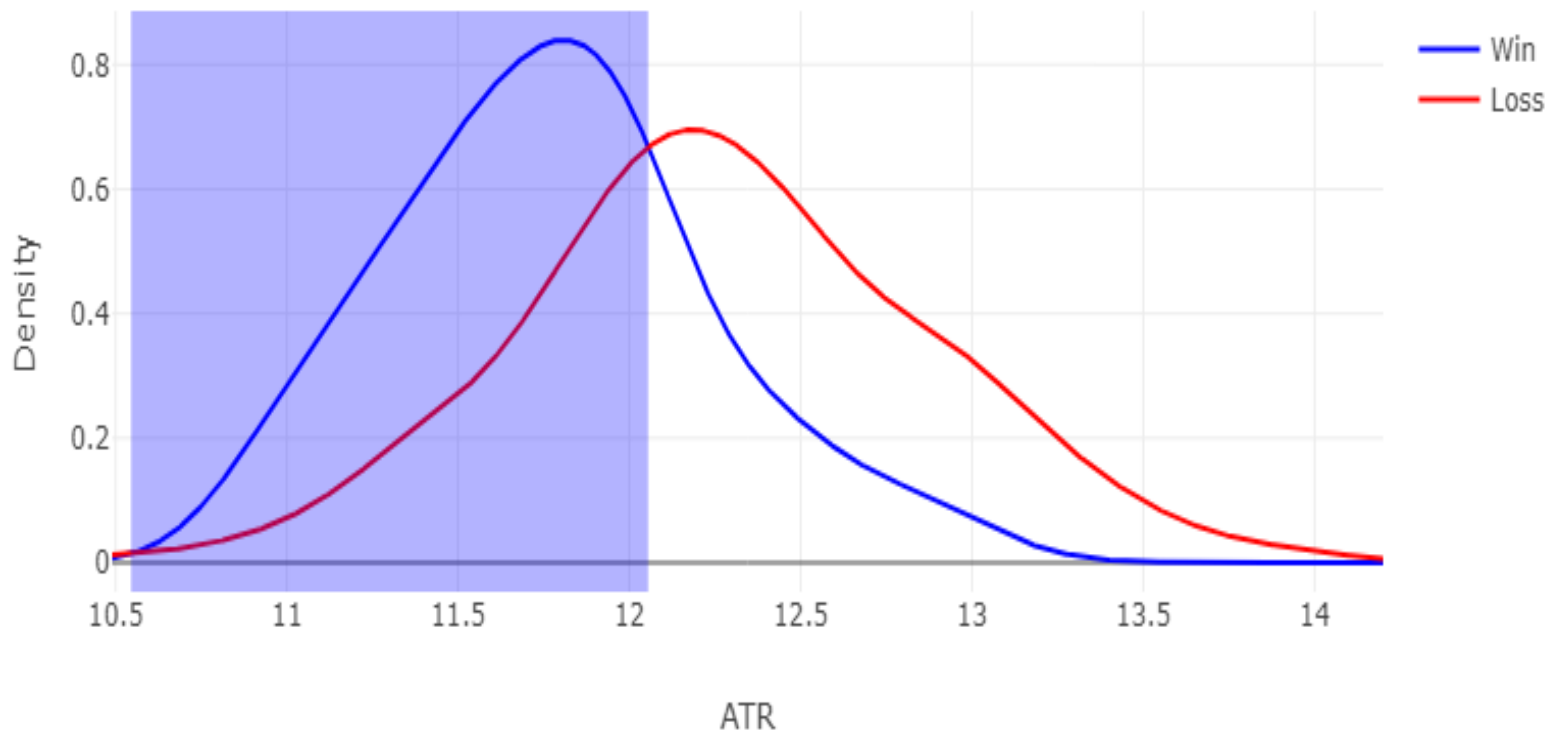
Permutation Importance Scores (Short Trades)

KDE Plot with Optimal Win Ranges for ADX (LE)



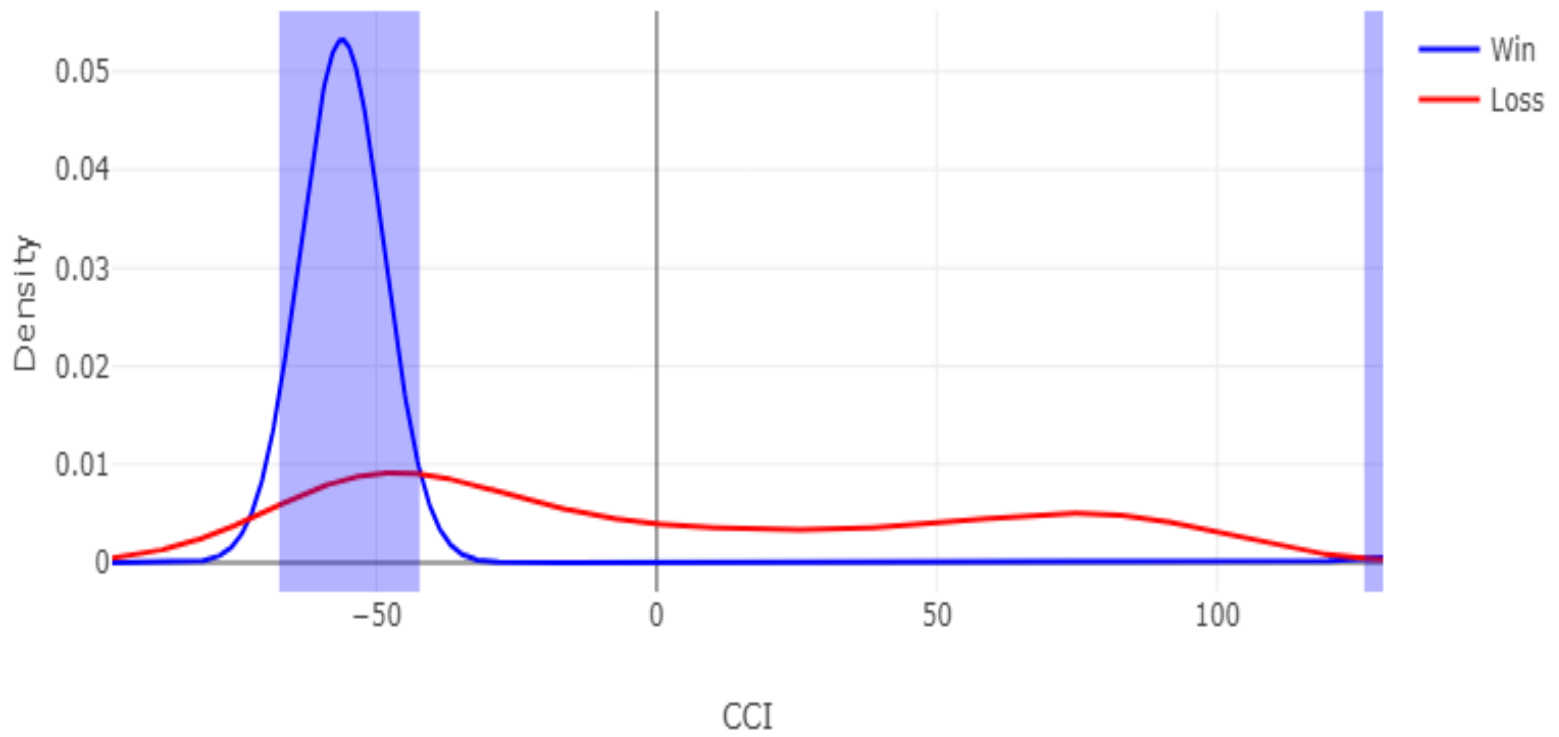
KDE Plot with Optimal Win Ranges for Win (LE)

KDE Plot with Optimal Win Ranges for ATR (LE)



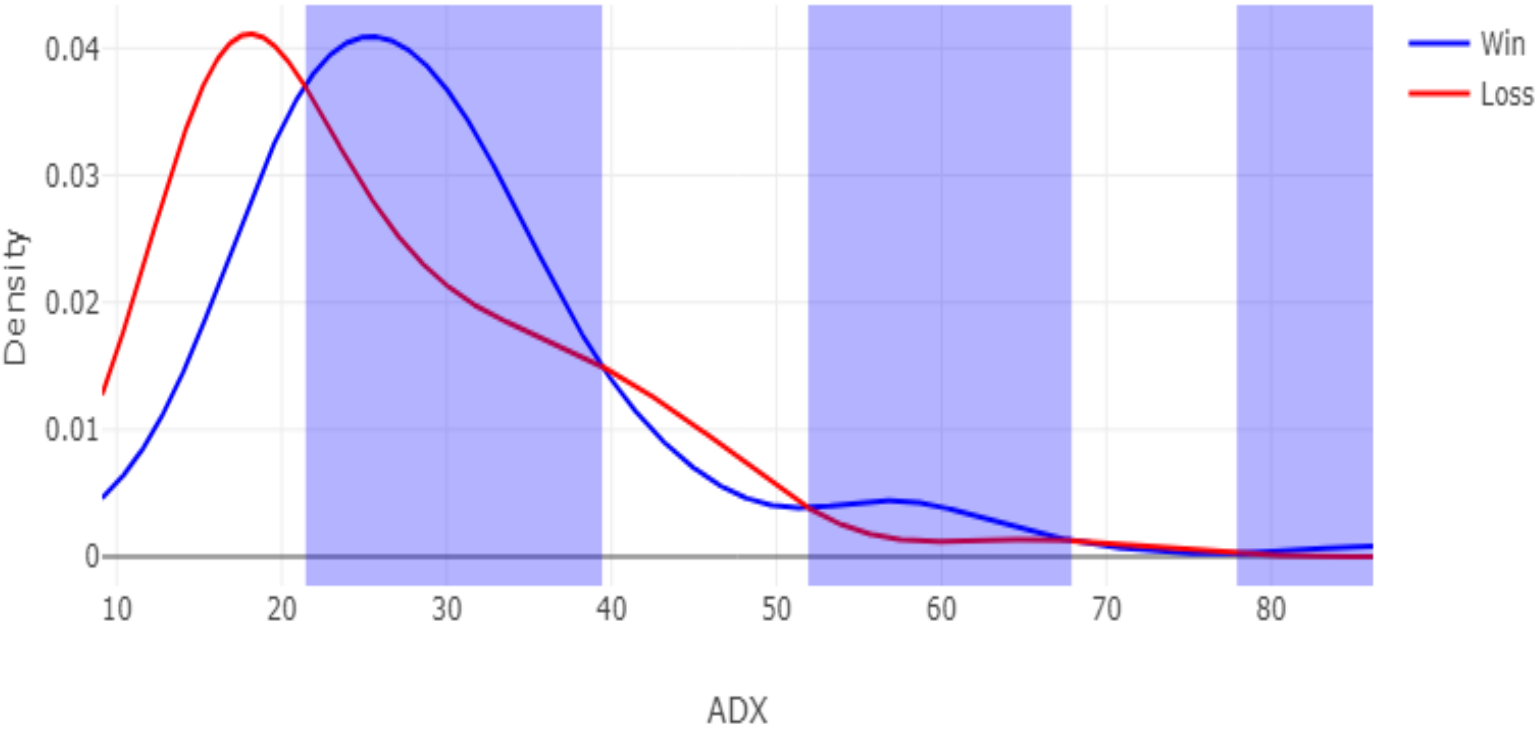
KDE Plot with Optimal Win Ranges for Win (LE)

KDE Plot with Optimal Win Ranges for CCI (LE)



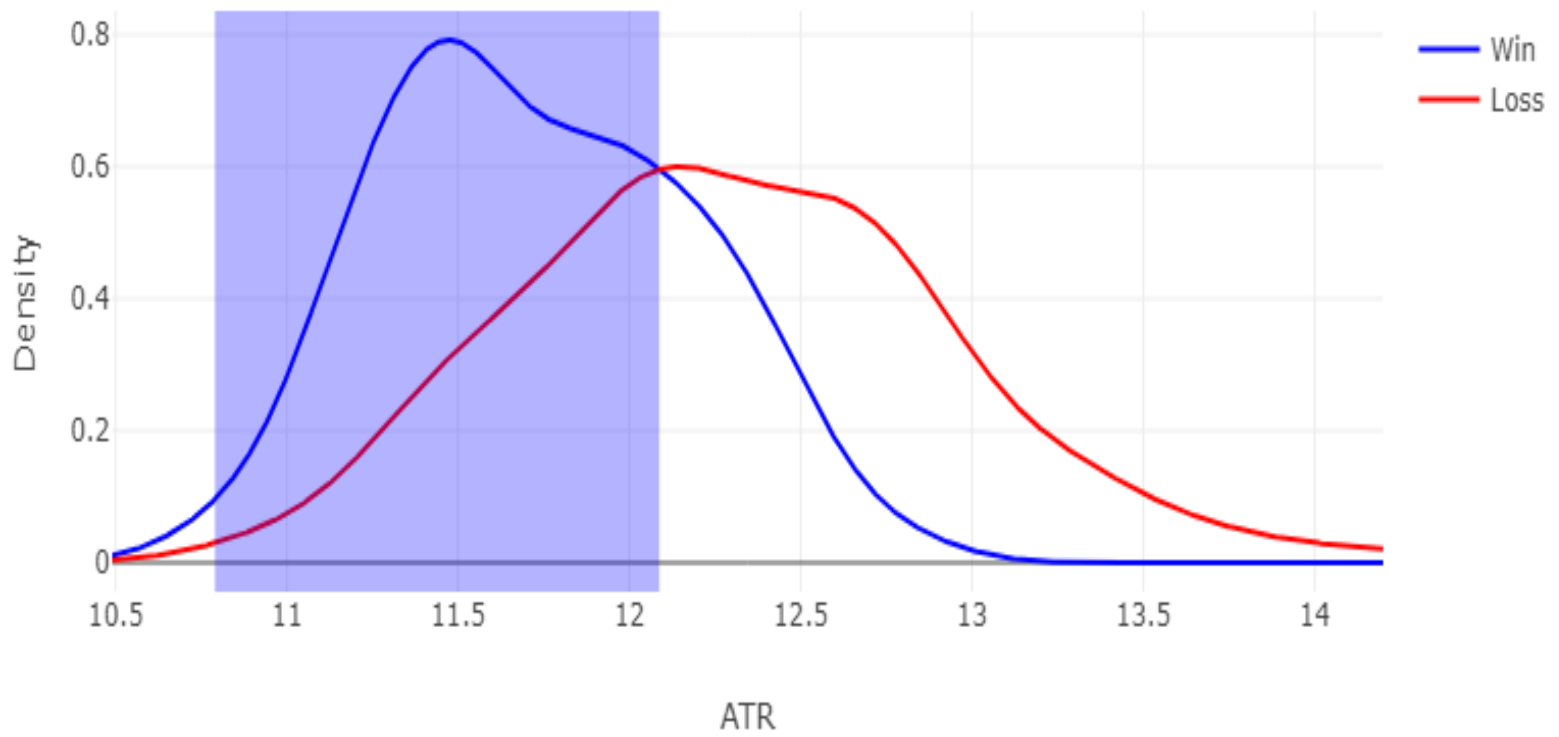
KDE Plot with Optimal Win Ranges for Win (LE)

KDE Plot with Optimal Win Ranges for ADX (SE)



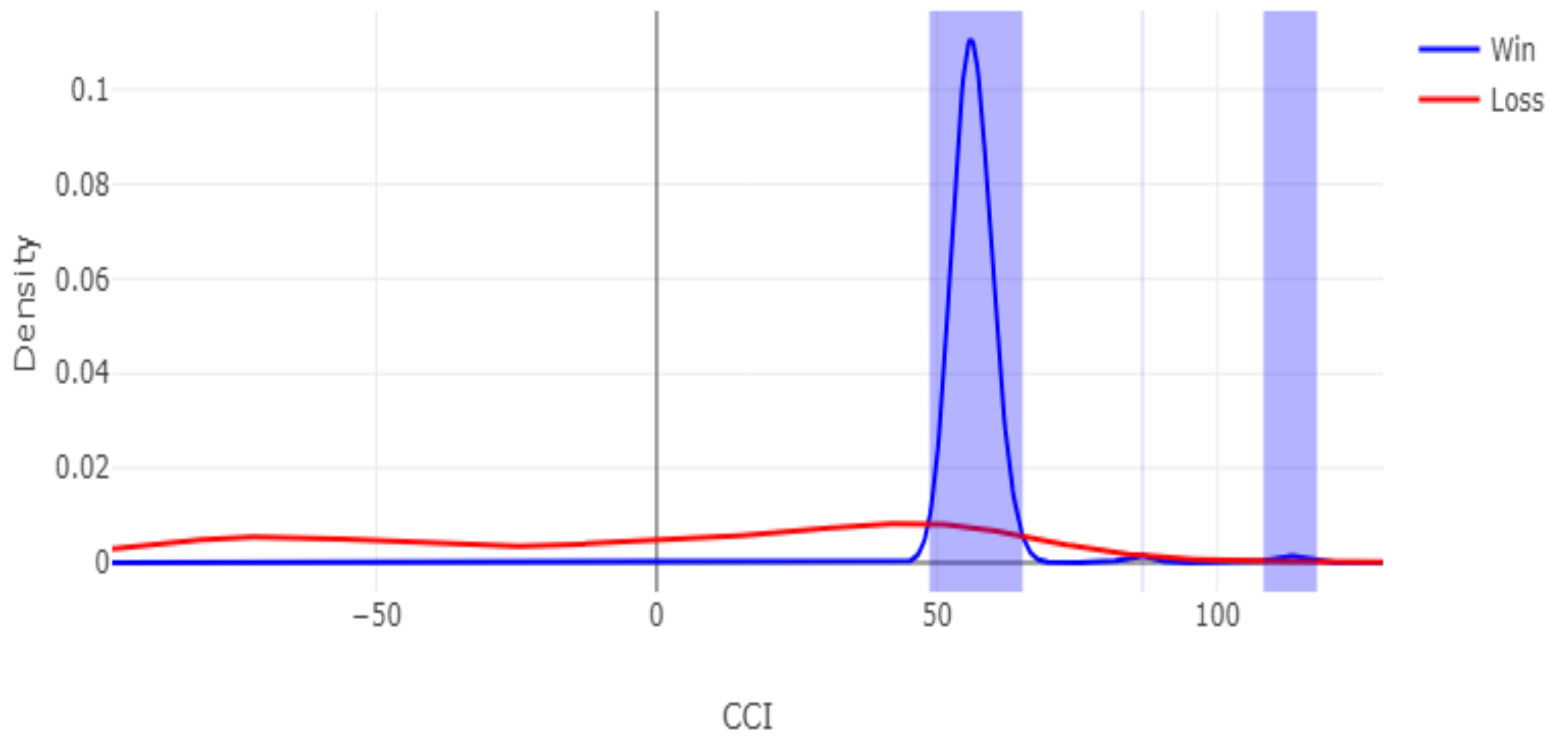
KDE Plot with Optimal Win Ranges for Win (SE)

KDE Plot with Optimal Win Ranges for ATR (SE)



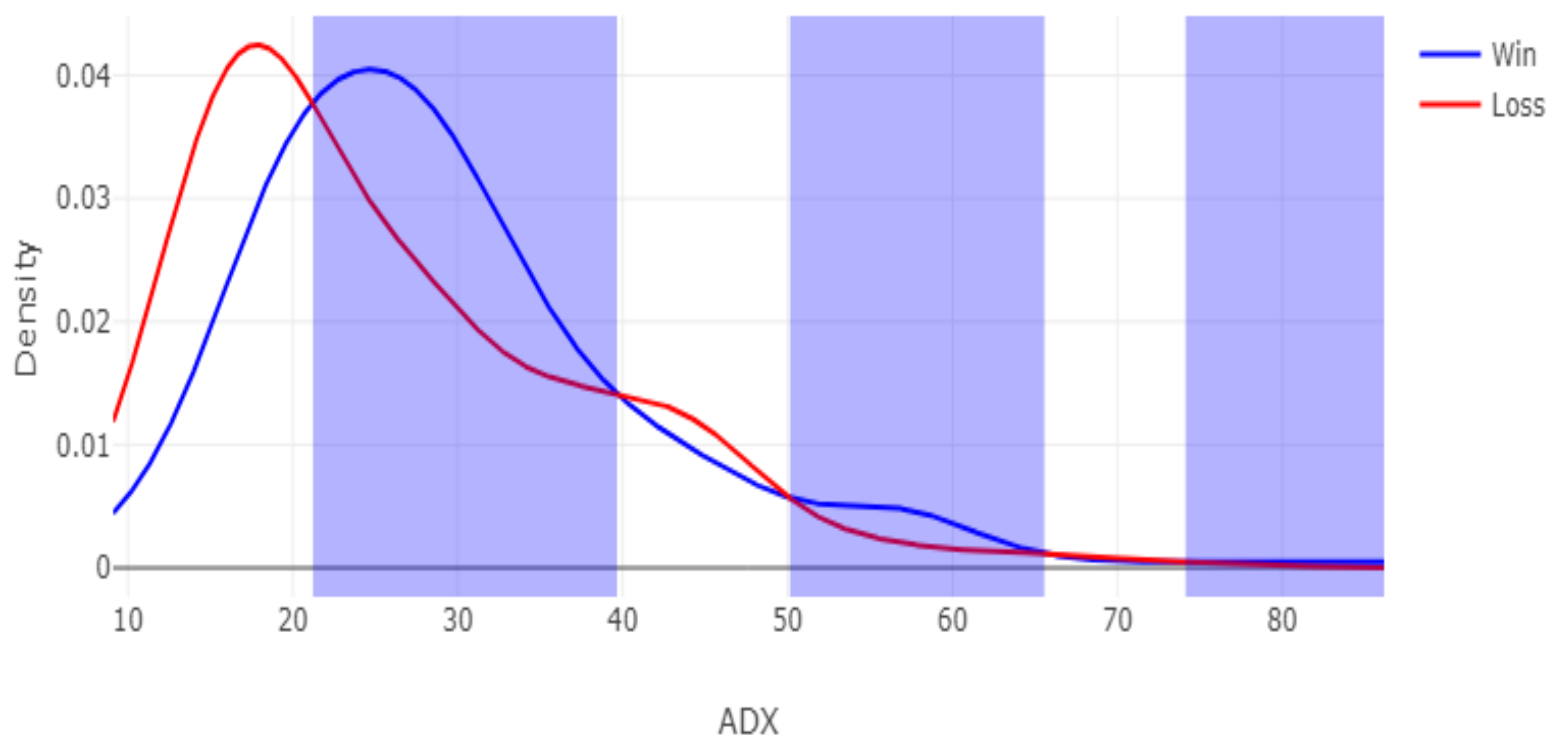
KDE Plot with Optimal Win Ranges for Win (SE)

KDE Plot with Optimal Win Ranges for CCI (SE)



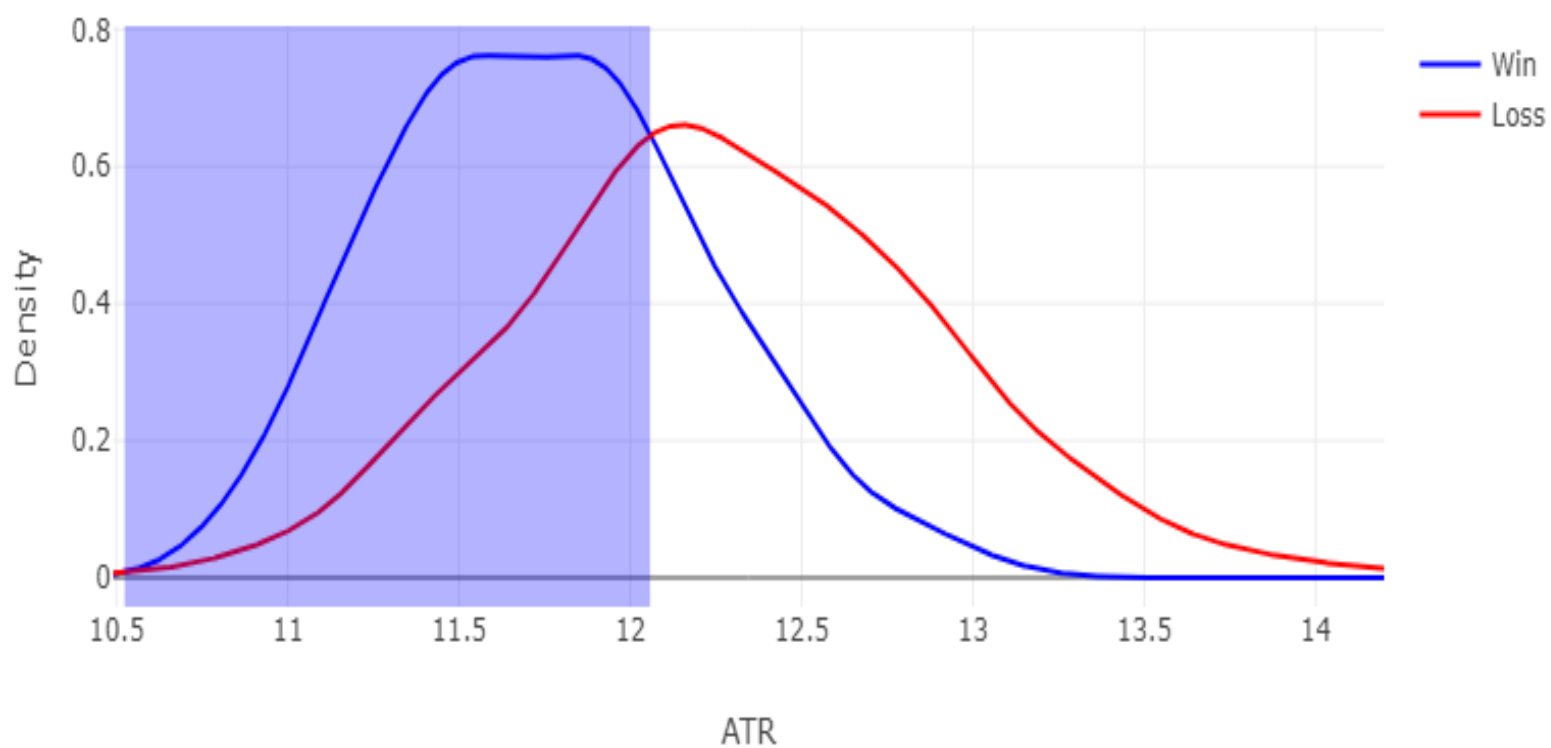
KDE Plot with Optimal Win Ranges for Win (SE)

KDE Plot with Optimal Win Ranges for ADX ()



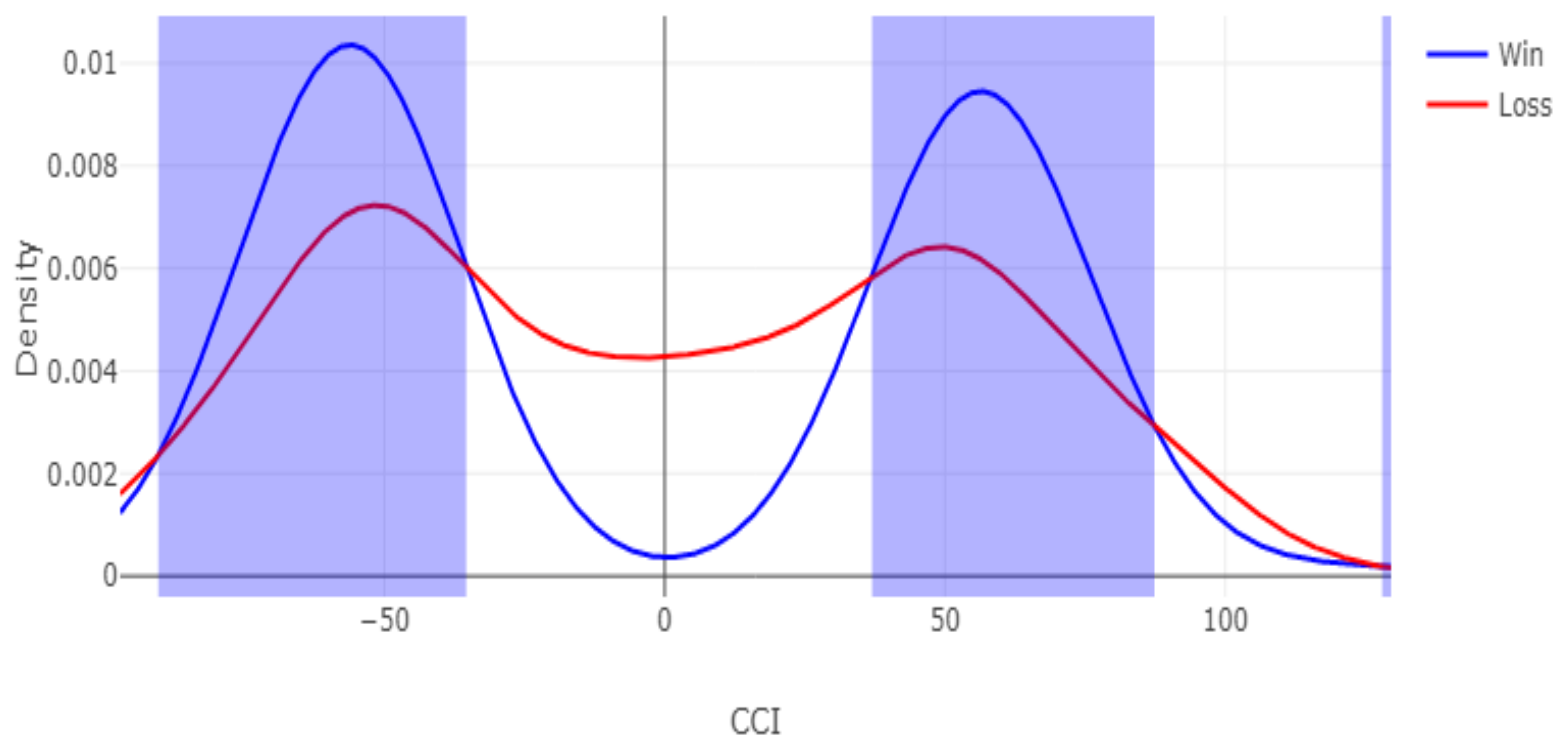
KDE Plot with Optimal Win Ranges for Win (Both)

KDE Plot with Optimal Win Ranges for ATR ()



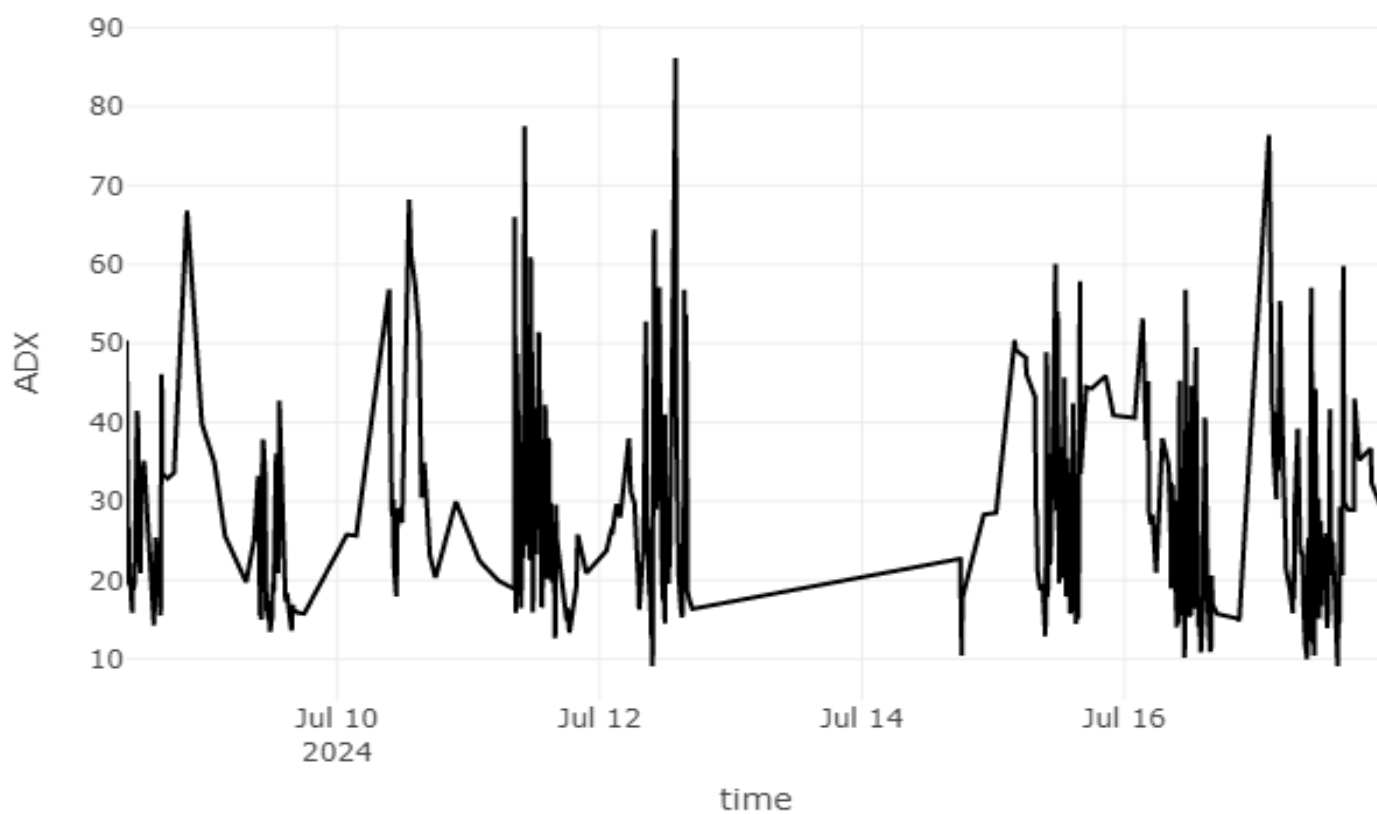
KDE Plot with Optimal Win Ranges for Win (Both)

KDE Plot with Optimal Win Ranges for CCI ()



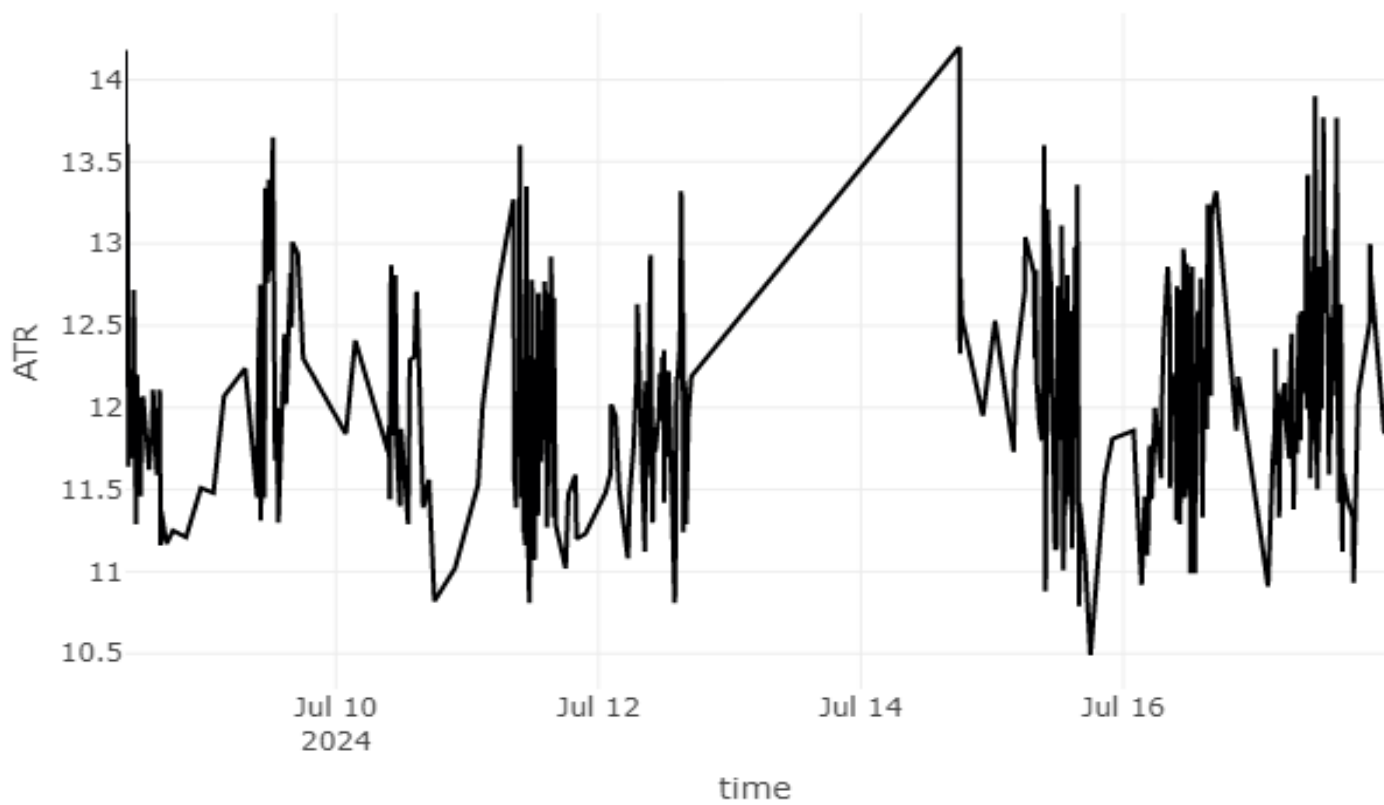
KDE Plot with Optimal Win Ranges for Win (Both)

ADX Over Time



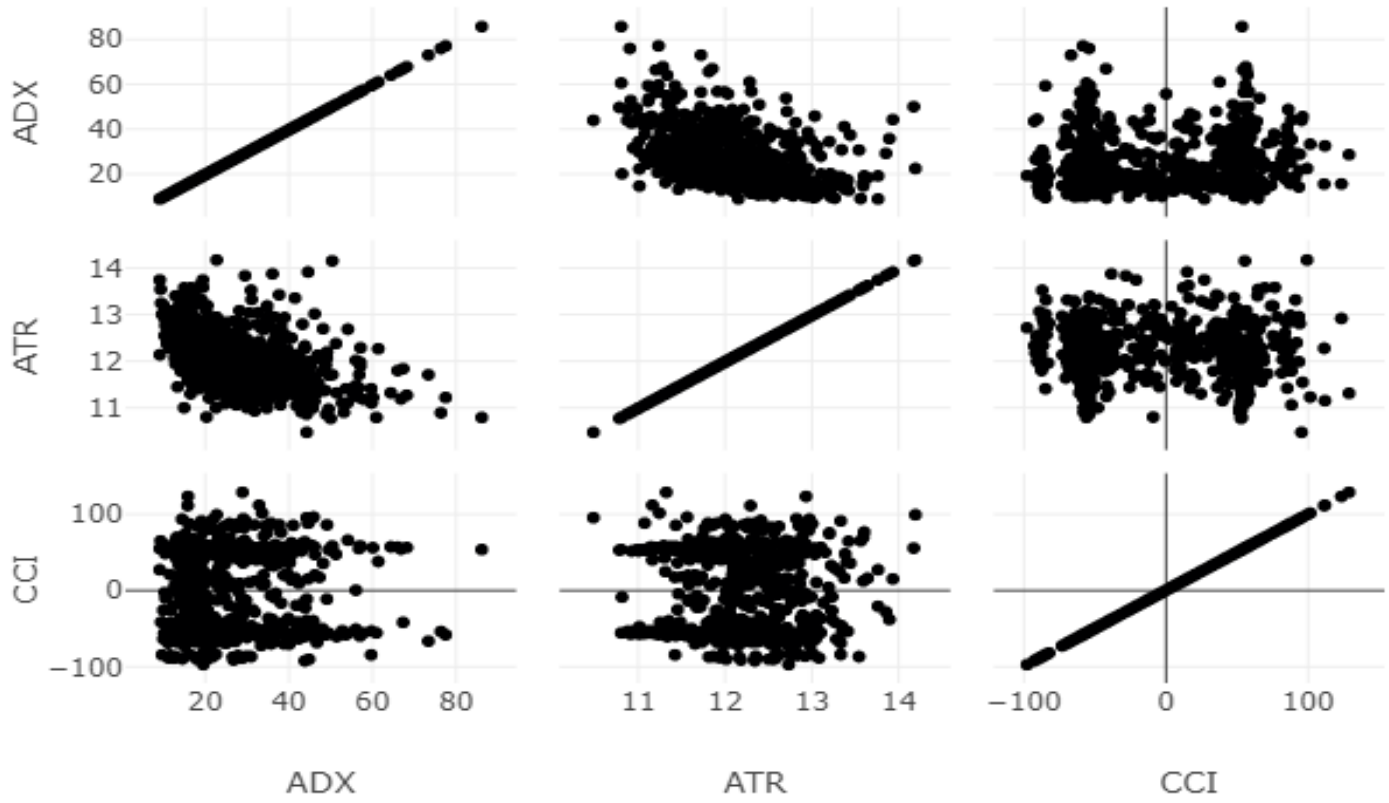
ADX Over Time

ATR Over Time



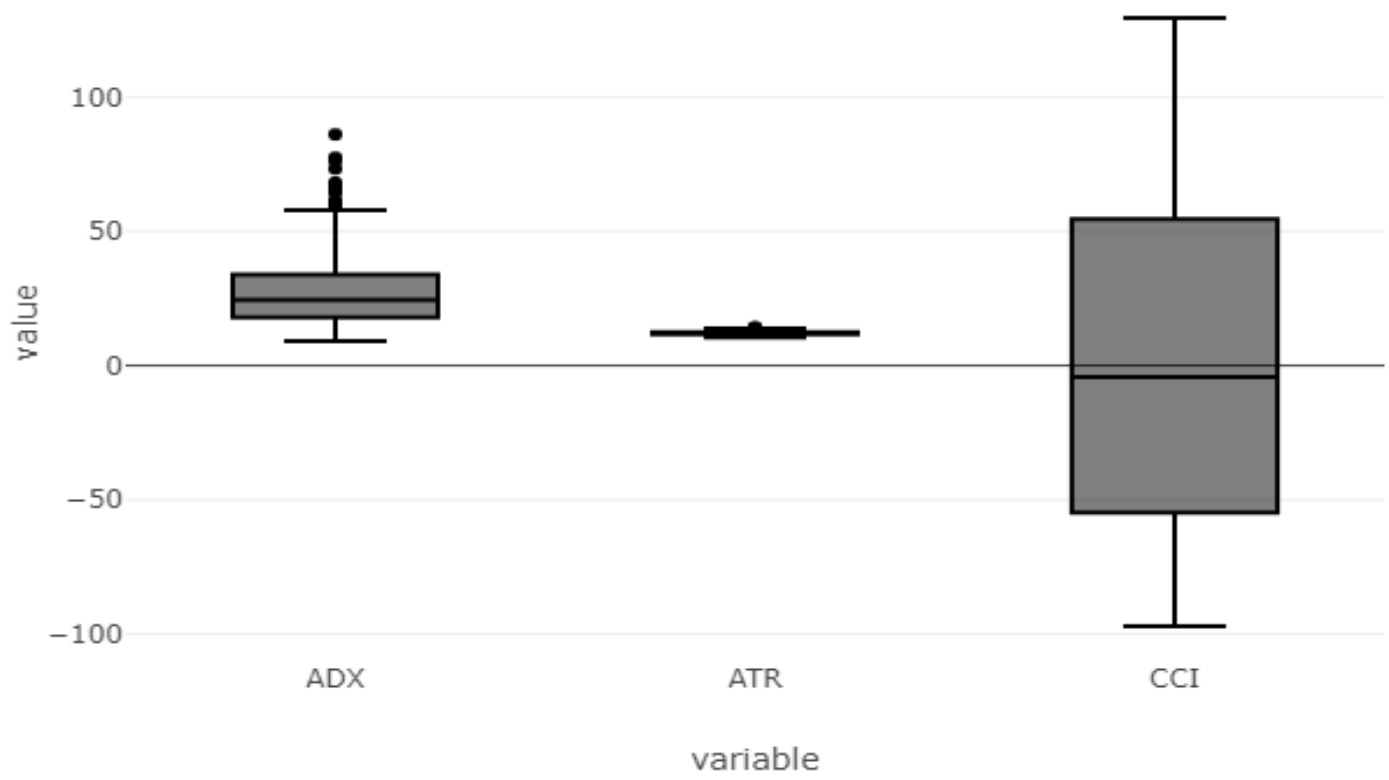
ATR Over Time

Pairplot of Selected Indicators



Pairplot of Selected Indicators

Boxplot of Selected Indicators



Boxplot of Selected Indicators

count	mean	std	min	25%	50%	75%	max
090.0	27.2266231884058	12.205346055116623	9.11	17.9925	24.455	34.004999999999995	86.17
090.0	12.125130434782609	0.6151582965197695	10.49	11.69	12.09	12.5275	14.2
090.0	-0.36813043478260834	22.0039212549974	-97.15	-54.8775	-4.220000000000001	54.585	129.59

Correlation (Long Trades)
0.11469654091341713
-0.3953125456056138
-0.49840984876723987

feature	F-value	p-value
CCI	113.36728128890309	4.604320048311667e-23
ATR	63.529122587076664	2.3670458433308536e-14
ADX	4.572418215984965	0.03319680695503412

feature	MI
CCI	0.31199528822615963
ATR	0.1077193985514755
ADX	0.0

feature	Importance
CCI	0.38270531400966185
ADX	0.16144927536231882
ATR	0.10946859903381641

Correlation (Short Trades)
0.5169845456245974
0.13554961087983294
-0.413042025751982

feature	F-value	p-value
CCI	125.11433119893164	5.684572309475175e-25
ATR	70.55381766074122	1.2016024357932783e-15
ADX	6.420139777346888	0.011727923921789707

feature	MI
CCI	0.334179200998977
ATR	0.11323023647737518
ADX	0.056683787018232845

feature	Importance
CCI	0.378743961352657
ADX	0.1264734299516908
ATR	0.08724637681159422

feature	trade_type	optimal_win_range_start	optimal_win_range_end
ADX	LE	21.533603603603602	41.405495495495494
ADX	LE	47.005135135135134	64.6918018018018
ADX	LE	70.83774774774774	77.53
ATR	LE	10.545255255255256	12.054414414414413
CCI	LE	-67.34333333333333	-42.307764431097766
CCI	LE	126.2387821154488	129.59

feature	trade_type	optimal_win_range_start	optimal_win_range_end
ADX	SE	21.451941941941943	39.4248948948949
ADX	SE	51.92111111111112	67.8884984984985
ADX	SE	77.91632632632633	86.17
ATR	SE	10.79	12.087097097097097
CCI	SE	48.65726726726726	65.27663663663662
CCI	SE	86.54942942942941	86.771021021021
CCI	SE	108.2654054054054	117.79384384384383

feature	trade_type	optimal_win_range_start	optimal_win_range_end
ADX		21.22053053053053	39.656306306306305
ADX		50.14695695695696	65.57438438438439
ADX		74.13660660660666	86.17
ATR		10.523423423423424	12.057187187187187
CCI		-90.340990990991	-35.41498498498499
CCI		36.98747747747748	87.37414414414414
CCI		128.00123123123123	129.59

The feature 'ADX' has a low correlation score of 0.11 for Long trades, indicating a weaker relationship with the target variable. 'ADX' might not be very influential in determining Long outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'ATR' has a low correlation score of -0.40 for Long trades, indicating a weaker relationship with the target variable. 'ATR' might not be very influential in determining Long outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'CCI' has a low correlation score of -0.50 for Long trades, indicating a weaker relationship with the target variable. 'CCI' might not be very influential in determining Long outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'CCI' has a high ANOVA F-Test score of 113.37 for Long trades, indicating a strong influence on the target variable. This means changes in 'CCI' are strongly associated with Long outcomes. Consider using this feature for developing strategies or setting thresholds.

The feature 'ATR' has a high ANOVA F-Test score of 63.53 for Long trades, indicating a strong influence on the target variable. This means changes in 'ATR' are strongly associated with Long outcomes. Consider using this feature for developing strategies or setting thresholds.

The feature 'ADX' has a high ANOVA F-Test score of 4.57 for Long trades, indicating a strong influence on the target variable. This means changes in 'ADX' are strongly associated with Long outcomes. Consider using this feature for developing strategies or setting thresholds.

The feature 'CCI' has a low Mutual Information score of 0.31 for Long trades, indicating a weaker relationship with the target variable. 'CCI' might not be very influential in determining Long outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'ATR' has a low Mutual Information score of 0.11 for Long trades, indicating a weaker relationship with the target variable. 'ATR' might not be very influential in determining Long outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'ADX' has a low Mutual Information score of 0.00 for Long trades, indicating a weaker relationship with the target variable. 'ADX' might not be very influential in determining Long outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'CCI' has a low Permutation Importance score of 0.38 for Long trades, indicating a weaker relationship with the target variable. 'CCI' might not be very influential in determining Long outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'ADX' has a low Permutation Importance score of 0.16 for Long trades, indicating a weaker relationship with the target variable. 'ADX' might not be very influential in determining Long outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'ATR' has a low Permutation Importance score of 0.11 for Long trades, indicating a weaker relationship with the target variable. 'ATR' might not be very influential in determining Long outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'CCI' has a moderate correlation score of 0.52 for Short trades, suggesting a notable impact on the target variable. It is worth considering 'CCI' when analyzing your trading strategy. Look at how this feature interacts with others for a combined effect.

The feature 'ADX' has a low correlation score of 0.14 for Short trades, indicating a weaker relationship with the target variable. 'ADX' might not be very influential in determining Short outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'ATR' has a low correlation score of -0.41 for Short trades, indicating a weaker relationship with the target variable. 'ATR' might not be very influential in determining Short outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'CCI' has a high ANOVA F-Test score of 125.11 for Short trades, indicating a strong influence on the target variable. This means changes in 'CCI' are strongly associated with Short outcomes. Consider using this feature for developing strategies or setting thresholds.

The feature 'ATR' has a high ANOVA F-Test score of 70.55 for Short trades, indicating a strong influence on the target variable. This means changes in 'ATR' are strongly associated with Short outcomes. Consider using this feature for developing strategies or setting thresholds.

The feature 'ADX' has a high ANOVA F-Test score of 6.42 for Short trades, indicating a strong influence on the target variable. This means changes in 'ADX' are strongly associated with Short outcomes. Consider using this feature for developing strategies or setting thresholds.

The feature 'CCI' has a low Mutual Information score of 0.33 for Short trades, indicating a weaker relationship with the target variable. 'CCI' might not be very influential in determining Short outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'ATR' has a low Mutual Information score of 0.11 for Short trades, indicating a weaker relationship with the target variable. 'ATR' might not be very influential in determining Short outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'ADX' has a low Mutual Information score of 0.06 for Short trades, indicating a weaker relationship with the target variable. 'ADX' might not be very influential in determining Short outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'CCI' has a low Permutation Importance score of 0.38 for Short trades, indicating a weaker relationship with the target variable. 'CCI' might not be very influential in determining Short outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'ADX' has a low Permutation Importance score of 0.13 for Short trades, indicating a weaker relationship with the target variable. 'ADX' might not be very influential in determining Short outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.

The feature 'ATR' has a low Permutation Importance score of 0.09 for Short trades, indicating a weaker relationship with the target variable. 'ATR' might not be very influential in determining Short outcomes. However, do not discard it outright; it may still provide value in combination with other indicators.