

Cross-validation results for regression methods

response	num_features	scoring	best_estimator	best_score
1_min_return	4	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.1639495
1_min_return	4	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.1639495
1_min_return	8	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1244986
1_min_return	4	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1159188
1_min_return	15	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0999472
1_min_return	8	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1,	0.0890769

			min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
1_min_return	8	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.08721 86
1_min_return	15	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.08451 69
1_min_return	8	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.07689 52
1_min_return	4	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.06030 35
1_min_return	15	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=20, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.02975 65
1_min_return	15	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=28, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False,	0.02911 18

			random_state=None, splitter='best')	
1_min_return	4	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=2, weights='distance')	0.02534 01
1_min_return	15	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.02406 02
1_min_return	8	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.01968 31
1_min_return	15	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01766 27
1_min_return	43	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01692 25
1_min_return	8	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=150, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01623 49
1_min_return	15	Trad eZ	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000294344914513, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.01384 69
1_min_return	43	Trad eZ	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.01346 48
1_min_return	15	Trad eZ	Ridge(alpha=0.1, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto',	0.01309 4

			tol=0.001)	
1_min_return	15	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.01262 93
1_min_return	4	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=150, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01151 28
1_min_return	4	Trad eZ	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=7.35862286283e-05, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.01064 55
1_min_return	8	Trad eZ	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.00976 08
1_min_return	4	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True), learning_rate=1.0, loss='linear', n_estimators=100, random_state=None)	0.00889 07
1_min_return	8	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True), learning_rate=1.0, loss='linear', n_estimators=200, random_state=None)	0.00806 48
1_min_return	8	Trad eZ	SVR(C=1, cache_size=1024, coef0=0.0, degree=3, epsilon=7.35862286283e-05, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.00773 59
1_min_return	4	Trad eZ	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.00677 6
1_min_return	8	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.00553 78
1_min_return	15	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=False), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	0.00385 36
1_min_return	4	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None,	0.00343 14

			splitter='best'), learning_rate=1.0, loss='linear', n_estimators=200, random_state=None)	
1_min_return	8	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=200, random_state=None)	0.00293 41
1_min_return	15	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	0.00232 64
1_min_return	4	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.00208 95
10_min_return	4	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.10089 8
10_min_return	4	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.10089 8
10_min_return	8	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.03935 68
10_min_re	8	Trad	DecisionTreeRegressor(criterion='mse', max_depth=4,	0.03274

turn		eZ	max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	74
10_min_re turn	4	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.03147 22
10_min_re turn	8	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegresso r(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=100, random_state=None)	0.02993 39
10_min_re turn	8	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.02892 37
10_min_re turn	15	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='distance')	0.02568 25
10_min_re turn	4	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.02567 9
10_min_re turn	4	Trad eZ	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000220544846491, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True,	0.02552 68

			tol=0.001, verbose=False)	
10_min_re turn	15	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.02492 1
10_min_re turn	4	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='distance')	0.02441 92
10_min_re turn	15	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.02401 11
10_min_re turn	15	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegresso r(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=200, random_state=None)	0.02389 52
10_min_re turn	15	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.02198 41
10_min_re turn	4	Trad eZ	Ridge(alpha=1.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.02136 85
10_min_re turn	43	Trad eZ	Ridge(alpha=1.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.02038 78
10_min_re	15	Trad	RandomForestRegressor(bootstrap=True, criterion='mse',	0.01961

turn		eZ	max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	02
10_min_re turn	8	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01917 44
10_min_re turn	8	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.01872 54
10_min_re turn	4	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.01866 88
10_min_re turn	8	Trad eZ	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000882179385963, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.01863 1
10_min_re turn	8	Trad eZ	Ridge(alpha=1.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.01854 63
10_min_re turn	8	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.01778 33
10_min_re turn	15	Trad eZ	Ridge(alpha=0.1, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.01746 07
10_min_re turn	15	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.01647 12
10_min_re turn	4	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegresso r(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'),	0.01353 11

			learning_rate=1.0, loss='linear', n_estimators=50, random_state=None)	
10_min_return	15	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=False), learning_rate=1.0, loss='linear', n_estimators=200, random_state=None)	0.0127862
10_min_return	43	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0071164
10_min_return	15	Trad eZ	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000220544846491, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.0034209
10_min_return	8	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.001102
10_min_return	15	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0004717
10_min_return	4	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	- 0.000505
10_min_return	4	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True), learning_rate=1.0, loss='linear', n_estimators=100, random_state=None)	- 0.0117242
10_min_return	8	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=False), learning_rate=1.0, loss='linear', n_estimators=100, random_state=None)	- 0.0165847
20_min_return	15	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2,	0.0367824

			min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=200, random_state=None)	
20_min_return	4	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0362107
20_min_return	4	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0362107
20_min_return	4	Trad eZ	Ridge(alpha=1.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.0355705
20_min_return	8	Trad eZ	Ridge(alpha=1.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.0297332
20_min_return	8	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	0.0281682
20_min_return	8	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.0257909
20_min_return	4	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0246071
20_min_re	4	Trad	RandomForestRegressor(bootstrap=True, criterion='mse',	0.02441

turn		eZ	max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	39
20_min_re turn	4	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.02340 6
20_min_re turn	15	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.02295 64
20_min_re turn	4	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(cop y_X=True, fit_intercept=True, n_jobs=1, normalize=False), learning_rate=1.0, loss='linear', n_estimators=200, random_state=None)	0.02266 12
20_min_re turn	4	Trad eZ	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000304687250975, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.02201 59
20_min_re turn	43	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.02079 36
20_min_re turn	8	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.01978 63
20_min_re turn	8	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None,	0.01978 63

			splitter='best')	
20_min_return	15	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01977 46
20_min_return	8	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01902 11
20_min_return	4	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=200, random_state=None)	0.01901 48
20_min_return	43	Trad eZ	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.01875 66
20_min_return	15	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	0.01719 87
20_min_return	15	Trad eZ	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.01719 1
20_min_return	8	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01700 03

20_min_re turn	15	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.01560 56
20_min_re turn	15	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.01424 79
20_min_re turn	15	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.01060 48
20_min_re turn	15	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.01000 94
20_min_re turn	8	Trad eZ	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000304687250975, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.00862 15
20_min_re turn	4	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	0.00627 81
20_min_re turn	8	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(cop y_X=True, fit_intercept=True, n_jobs=1, normalize=True), learning_rate=1.0, loss='linear', n_estimators=200, random_state=None)	0.00307 5
20_min_re turn	15	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=50, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.00306 72
20_min_re turn	4	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=50, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.00200 14

20_min_return	15	Trad eZ	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000304687250975, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.0008809
20_min_return	8	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	- 0.0009363
20_min_return	8	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	- 0.0023196
40_min_return	15	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0712962
40_min_return	15	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	0.0567708
40_min_return	8	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0534236
40_min_return	8	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None,	0.0534236

			splitter='best')	
40_min_return	8	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=100, random_state=None)	0.04097 52
40_min_return	4	Trad eZ	Ridge(alpha=1.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.03312 54
40_min_return	8	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.03079 02
40_min_return	15	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.02905 82
40_min_return	8	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.02881 24
40_min_return	4	Trad eZ	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000426505451693, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.02755 5
40_min_return	15	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False,	0.02662 31

			random_state=None, verbose=0, warm_start=False)	
40_min_re turn	8	Trad eZ	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=False, random_state=None, solver='auto', tol=0.001)	0.02558 99
40_min_re turn	8	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.02557 42
40_min_re turn	43	Trad eZ	Ridge(alpha=1.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.02292 85
40_min_re turn	4	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.02244 23
40_min_re turn	4	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01919 86
40_min_re turn	4	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegresso r(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	0.01866 72
40_min_re turn	15	Trad eZ	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.01820 96
40_min_re turn	43	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None,	0.01644 78

			verbose=0, warm_start=False)	
40_min_return	4	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.0159267
40_min_return	15	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.0155288
40_min_return	15	Trad eZ	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=0.00170602180677, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.0152361
40_min_return	4	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.0144676
40_min_return	8	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	0.013245
40_min_return	4	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=38, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0123587
40_min_return	8	Trad eZ	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.00170602180677, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.011951
40_min_return	15	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=False), learning_rate=1.0, loss='linear', n_estimators=200, random_state=None)	0.0112576
40_min_return	15	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0110953
40_min_return	4	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=52, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2,	0.010548

			min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	
40_min_return	15	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.009889
40_min_return	15	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=150, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0097647
40_min_return	4	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	0.0086228
40_min_return	8	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True), learning_rate=1.0, loss='linear', n_estimators=50, random_state=None)	0.0067826
40_min_return	4	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=150, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0010535
40_min_return	8	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=150, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-6.27E-05
5_min_return	8	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0403158
5_min_return	8	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2,	0.0391466

			min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	
5_min_return	15	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.03642 21
5_min_return	4	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.02829 49
5_min_return	15	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.02627 83
5_min_return	15	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.02627 83
5_min_return	4	Trad eZ	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000159924068623, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.02459 81
5_min_return	15	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=2, weights='distance')	0.02248 31
5_min_return	15	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=32,	0.02221 56

			max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
5_min_return	8	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	0.02214 49
5_min_return	15	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=100, random_state=None)	0.02118 08
5_min_return	8	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.02059 47
5_min_return	15	Trad eZ	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000159924068623, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.01980 07
5_min_return	4	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=1, weights='distance')	0.01959 61
5_min_return	8	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.01954 75

5_min_return	4	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=28, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.01858 32
5_min_return	8	Trad eZ	Ridge(alpha=0.1, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.01837 74
5_min_return	4	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=98, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.01821 28
5_min_return	8	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.01811 56
5_min_return	4	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01738 58
5_min_return	8	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01680 34
5_min_return	15	Trad eZ	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=False, random_state=None, solver='auto', tol=0.001)	0.01645 13
5_min_return	15	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.01636 36
5_min_return	8	Trad eZ	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000159924068623, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001,	0.01383 01

			verbose=False)	
5_min_return	43	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01297 45
5_min_return	43	Trad eZ	Ridge(alpha=0.1, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.01256 36
5_min_return	4	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.01248 99
5_min_return	4	Trad eZ	Ridge(alpha=0.1, copy_X=True, fit_intercept=True, max_iter=None, normalize=False, random_state=None, solver='auto', tol=0.001)	0.01248 99
5_min_return	4	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=100, random_state=None)	0.01242 54
5_min_return	8	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=50, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01203 49
5_min_return	4	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=150, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01172 64
5_min_return	15	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=50, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01154 58
5_min_return	15	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=False), learning_rate=1.0, loss='linear', n_estimators=50,	0.00885 12

			random_state=None)	
5_min_return	8	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=False), learning_rate=1.0, loss='linear', n_estimators=100, random_state=None)	0.00669 56
5_min_return	4	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=False), learning_rate=1.0, loss='linear', n_estimators=50, random_state=None)	- 0.00299 72
80_min_return	15	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.12139 43
80_min_return	8	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.11739 2
80_min_return	8	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.11739 2
80_min_return	15	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.10328 31
80_min_return	15	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.10328 31
80_min_re	8	Trad	RandomForestRegressor(bootstrap=True, criterion='mse',	0.06788

turn		eZ	max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	54
80_min_re turn	4	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.06702 32
80_min_re turn	4	Trad eZ	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.06702 32
80_min_re turn	8	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegresso r(criterion='mse', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=100, random_state=None)	0.05973 35
80_min_re turn	8	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.05407 2
80_min_re turn	15	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.05000 42

80_min_return	15	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	0.04636 22
80_min_return	8	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	0.04626 51
80_min_return	4	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	0.04420 87
80_min_return	15	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=50, random_state=None)	0.04245 79
80_min_return	4	Trad eZ	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	0.03862 9
80_min_return	4	Trad eZ	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.03852 53
80_min_return	4	Trad eZ	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False,	0.03736 2

			random_state=None, verbose=0, warm_start=False)	
80_min_re turn	4	Trad eZ	Ridge(alpha=1.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.03601 18
80_min_re turn	15	Trad eZ	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.03340 59
80_min_re turn	8	Trad eZ	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.03339 58
80_min_re turn	43	Trad eZ	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	0.03308 05
80_min_re turn	4	Trad eZ	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=2, weights='uniform')	0.02864 87
80_min_re turn	15	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=150, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.02737 07
80_min_re turn	8	Trad eZ	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=0.00238784178387, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.02712 44
80_min_re turn	4	Trad eZ	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000596960445968, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.02634 64
80_min_re turn	43	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.02324 69
80_min_re turn	8	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0,	0.02312 27

			max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
80_min_re turn	15	Trad eZ	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000596960445968, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	0.01721 86
80_min_re turn	15	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.01533 75
80_min_re turn	4	Trad eZ	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.01395 77
80_min_re turn	8	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.01261 05
80_min_re turn	4	Trad eZ	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	0.01116 86
80_min_re turn	15	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(cop y_X=True, fit_intercept=True, n_jobs=1, normalize=True), learning_rate=1.0, loss='linear', n_estimators=200, random_state=None)	0.00443 75
80_min_re turn	8	Trad eZ	AdaBoostRegressor(base_estimator=LinearRegression(cop y_X=True, fit_intercept=True, n_jobs=1, normalize=True), learning_rate=1.0, loss='linear', n_estimators=50, random_state=None)	- 0.00027 08
1_min_ret urn	15	Defa ult	DecisionTreeRegressor(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	9.08E- 04
1_min_ret urn	15	Defa ult	DecisionTreeRegressor(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	9.08E- 04
1_min_ret urn	4	Defa ult	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1,	8.98E- 04

			min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
1_min_return	4	Default	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	8.68E-04
1_min_return	15	Default	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	7.59E-04
1_min_return	15	Default	Ridge(alpha=1.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	7.40E-04
1_min_return	8	Default	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	7.07E-04
1_min_return	8	Default	Ridge(alpha=0.1, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	6.11E-04
1_min_return	8	Default	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	5.52E-04
1_min_return	43	Default	Ridge(alpha=1.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	3.72E-04
1_min_return	15	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1,	3.36E-04

			weights='distance')	
1_min_return	15	Default	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	3.27E-04
1_min_return	4	Default	Ridge(alpha=0.1, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	2.48E-04
1_min_return	4	Default	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=False)	2.21E-04
1_min_return	8	Default	DecisionTreeRegressor(criterion='mse', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	1.58E-04
1_min_return	8	Default	DecisionTreeRegressor(criterion='mse', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	1.58E-04
1_min_return	15	Default	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-9.56E-06
1_min_return	8	Default	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-9.29E-05
1_min_return	4	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None,	-1.41E-04

			splitter='best')	
1_min_return	4	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-1.41E-04
1_min_return	8	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='distance')	-2.05E-04
1_min_return	4	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	-2.26E-03
1_min_return	43	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.40E-02
1_min_return	4	Default	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=100, random_state=None)	-1.80E-02
1_min_return	15	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-2.01E-02
1_min_return	8	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-3.00E-02
1_min_return	4	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0,	-4.48E-02

			max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
1_min_return	8	Default	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=50, random_state=None)	-7.08E-02
1_min_return	15	Default	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000294344914513, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-1.47E-01
1_min_return	4	Default	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000294344914513, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-1.86E-01
1_min_return	8	Default	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=7.35862286283e-05, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-2.53E-01
1_min_return	15	Default	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=50, random_state=None)	-2.70E-01
10_min_return	4	Default	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-8.16E-04
10_min_re	4	Default	Ridge(alpha=1.0, copy_X=True, fit_intercept=True,	-1.17E-

turn		ult	max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	03
10_min_re turn	43	Defa ult	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-1.20E- 03
10_min_re turn	4	Defa ult	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.20E- 03
10_min_re turn	15	Defa ult	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-1.23E- 03
10_min_re turn	8	Defa ult	Ridge(alpha=1.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-1.30E- 03
10_min_re turn	4	Defa ult	DecisionTreeRegressor(criterion='mse', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-1.34E- 03
10_min_re turn	4	Defa ult	DecisionTreeRegressor(criterion='mse', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-1.43E- 03
10_min_re turn	8	Defa ult	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.51E- 03
10_min_re turn	4	Defa ult	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	-1.59E- 03

10_min_return	15	Default	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.78E-03
10_min_return	8	Default	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=False)	-2.12E-03
10_min_return	15	Default	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-3.45E-03
10_min_return	15	Default	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	-3.55E-03
10_min_return	8	Default	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-3.57E-03
10_min_return	15	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	-3.72E-03
10_min_return	4	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	-6.26E-03
10_min_return	8	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	-6.45E-03
10_min_return	8	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None,	-6.56E-03

			max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	
10_min_re turn	8	Defa ult	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-6.56E- 03
10_min_re turn	15	Defa ult	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-7.40E- 03
10_min_re turn	15	Defa ult	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-7.40E- 03
10_min_re turn	15	Defa ult	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000882179385963, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-3.46E- 02
10_min_re turn	43	Defa ult	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-4.20E- 02
10_min_re turn	8	Defa ult	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000882179385963, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-4.59E- 02
10_min_re turn	4	Defa ult	AdaBoostRegressor(base_estimator=DecisionTreeRegresso r(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False,	-4.79E- 02

			random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	
10_min_re turn	8	Defa ult	AdaBoostRegressor(base_estimator=DecisionTreeRegresso r(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=100, random_state=None)	-6.10E- 02
10_min_re turn	4	Defa ult	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000882179385963, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-6.70E- 02
10_min_re turn	15	Defa ult	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-7.56E- 02
10_min_re turn	8	Defa ult	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-9.11E- 02
10_min_re turn	4	Defa ult	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.06E- 01
10_min_re turn	15	Defa ult	AdaBoostRegressor(base_estimator=DecisionTreeRegresso r(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=50, random_state=None)	-3.04E- 01
20_min_re turn	15	Defa ult	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None,	-2.52E- 03

			normalize=True, random_state=None, solver='auto', tol=0.001)	
20_min_return	4	Default	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-2.57E-03
20_min_return	8	Default	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-2.61E-03
20_min_return	4	Default	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-2.64E-03
20_min_return	43	Default	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-2.66E-03
20_min_return	8	Default	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-2.74E-03
20_min_return	15	Default	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-3.03E-03
20_min_return	4	Default	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-3.37E-03

20_min_return	4	Default	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	-4.10E-03
20_min_return	4	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-4.83E-03
20_min_return	4	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-4.83E-03
20_min_return	8	Default	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	-5.23E-03
20_min_return	8	Default	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-5.99E-03
20_min_return	15	Default	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-6.20E-03
20_min_return	8	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-7.91E-03
20_min_return	8	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2,	-7.91E-03

			min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	
20_min_return	15	Default	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=False)	-8.35E-03
20_min_return	15	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-9.59E-03
20_min_return	15	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-9.59E-03
20_min_return	15	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	-9.92E-03
20_min_return	4	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	-1.15E-02
20_min_return	8	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	-1.41E-02
20_min_return	8	Default	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	-2.35E-02
20_min_return	4	Default	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2,	-2.98E-02

			min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=200, random_state=None)	
20_min_return	15	Default	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000304687250975, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-3.24E-02
20_min_return	15	Default	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	-3.57E-02
20_min_return	8	Default	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000304687250975, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-4.06E-02
20_min_return	43	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-4.56E-02
20_min_return	4	Default	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.0012187490039, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-4.77E-02
20_min_return	15	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-9.00E-02
20_min_return	4	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.09E-01

20_min_return	8	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.09E-01
40_min_return	43	Default	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-4.88E-03
40_min_return	8	Default	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-5.00E-03
40_min_return	15	Default	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-5.00E-03
40_min_return	4	Default	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-5.22E-03
40_min_return	15	Default	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-5.24E-03
40_min_return	8	Default	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-5.34E-03
40_min_return	4	Default	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-5.72E-03
40_min_return	15	Default	RandomForestRegressor(bootstrap=True, criterion='mse',	-6.37E-

turn		ult	max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	03
40_min_re turn	4	Defa ult	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-7.74E- 03
40_min_re turn	8	Defa ult	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-7.77E- 03
40_min_re turn	4	Defa ult	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	-8.14E- 03
40_min_re turn	8	Defa ult	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-8.65E- 03
40_min_re turn	8	Defa ult	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-8.65E- 03
40_min_re turn	15	Defa ult	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	-9.96E- 03

40_min_return	15	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-1.02E-02
40_min_return	15	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-1.02E-02
40_min_return	8	Default	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	-1.18E-02
40_min_return	4	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-1.20E-02
40_min_return	4	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-1.20E-02
40_min_return	15	Default	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	-1.29E-02
40_min_return	8	Default	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=50,	-1.37E-02

			random_state=None)	
40_min_return	8	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	-1.40E-02
40_min_return	4	Default	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=50, random_state=None)	-1.40E-02
40_min_return	4	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	-1.52E-02
40_min_return	15	Default	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=False)	-1.68E-02
40_min_return	15	Default	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000426505451693, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-2.22E-02
40_min_return	8	Default	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000426505451693, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-2.62E-02
40_min_return	4	Default	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000426505451693, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-3.72E-02
40_min_return	43	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-6.53E-02
40_min_return	15	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False,	-9.54E-02

			random_state=None, verbose=0, warm_start=False)	
40_min_re turn	4	Defa ult	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.15E- 01
40_min_re turn	8	Defa ult	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.15E- 01
5_min_ret urn	4	Defa ult	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.13E- 04
5_min_ret urn	15	Defa ult	Ridge(alpha=1.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-1.66E- 04
5_min_ret urn	4	Defa ult	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-2.44E- 04
5_min_ret urn	4	Defa ult	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-3.41E- 04
5_min_ret urn	4	Defa ult	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False,	-3.41E- 04

			random_state=None, splitter='best')	
5_min_return	15	Default	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-4.44E-04
5_min_return	43	Default	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-4.55E-04
5_min_return	8	Default	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-4.80E-04
5_min_return	15	Default	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-5.28E-04
5_min_return	8	Default	Ridge(alpha=1.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-5.30E-04
5_min_return	4	Default	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-6.22E-04
5_min_return	8	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-7.32E-04
5_min_return	8	Default	DecisionTreeRegressor(criterion='mse', max_depth=1,	-7.32E-

urn		ult	max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	04
5_min_return	8	Default	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-8.99E-04
5_min_return	4	Default	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	-1.17E-03
5_min_return	15	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-1.47E-03
5_min_return	15	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-1.47E-03
5_min_return	8	Default	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	-1.57E-03
5_min_return	15	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	-1.75E-03
5_min_return	15	Default	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	-1.96E-03
5_min_return	8	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	-3.46E-03
5_min_return	4	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski',	-6.12E-03

			metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	
5_min_return	43	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-3.42E-02
5_min_return	15	Default	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.00063969627449, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-5.03E-02
5_min_return	15	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-5.09E-02
5_min_return	8	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-6.58E-02
5_min_return	8	Default	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.00063969627449, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-7.05E-02
5_min_return	4	Default	SVR(C=0.01, cache_size=1024, coef0=0.0, degree=3, epsilon=0.00063969627449, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-8.05E-02
5_min_return	4	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-9.74E-02
5_min_return	4	Default	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False,	-1.38E-01

			random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=50, random_state=None)	
5_min_return	8	Default	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=50, random_state=None)	-2.78E-01
5_min_return	15	Default	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=50, random_state=None)	-2.79E-01
80_min_return	15	Default	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-5.73E-03
80_min_return	8	Default	ExtraTreesRegressor(bootstrap=False, criterion='mse', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-6.04E-03
80_min_return	8	Default	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-8.34E-03
80_min_return	43	Default	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-8.35E-03
80_min_re	4	Defa	ExtraTreesRegressor(bootstrap=False, criterion='mse',	-8.39E-

turn		ult	max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	03
80_min_re turn	15	Defa ult	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-8.39E- 03
80_min_re turn	4	Defa ult	Ridge(alpha=10.0, copy_X=True, fit_intercept=True, max_iter=None, normalize=True, random_state=None, solver='auto', tol=0.001)	-8.71E- 03
80_min_re turn	4	Defa ult	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-9.23E- 03
80_min_re turn	4	Defa ult	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-9.49E- 03
80_min_re turn	4	Defa ult	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-9.49E- 03
80_min_re turn	15	Defa ult	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.02E- 02

80_min_return	8	Default	RandomForestRegressor(bootstrap=True, criterion='mse', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.05E-02
80_min_return	8	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	-1.10E-02
80_min_return	15	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-1.18E-02
80_min_return	15	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-1.18E-02
80_min_return	15	Default	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	-1.19E-02
80_min_return	4	Default	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	-1.29E-02
80_min_return	8	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	-1.44E-02
80_min_return	8	Default	DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False,	-1.44E-02

			random_state=None, splitter='best')	
80_min_re turn	4	Defa ult	KNeighborsRegressor(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	-1.57E- 02
80_min_re turn	8	Defa ult	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	-2.02E- 02
80_min_re turn	8	Defa ult	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000596960445968, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-2.61E- 02
80_min_re turn	15	Defa ult	LinearRegression(copy_X=True, fit_intercept=True, n_jobs=1, normalize=True)	-2.64E- 02
80_min_re turn	4	Defa ult	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.00238784178387, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-2.75E- 02
80_min_re turn	15	Defa ult	SVR(C=0.0001, cache_size=1024, coef0=0.0, degree=3, epsilon=0.000596960445968, gamma='auto', kernel='rbf', max_iter=-1, shrinking=True, tol=0.001, verbose=False)	-3.02E- 02
80_min_re turn	4	Defa ult	AdaBoostRegressor(base_estimator=DecisionTreeRegresso r(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	-3.33E- 02
80_min_re turn	43	Defa ult	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-9.41E- 02
80_min_re turn	4	Defa ult	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.08E- 01

80_min_return	8	Default	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=100, random_state=None)	-1.12E-01
80_min_return	15	Default	AdaBoostRegressor(base_estimator=DecisionTreeRegressor(criterion='mse', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, loss='linear', n_estimators=400, random_state=None)	-1.30E-01
80_min_return	15	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.35E-01
80_min_return	8	Default	BaggingRegressor(base_estimator=None, bootstrap=True, bootstrap_features=False, max_features=1.0, max_samples=1.0, n_estimators=300, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	-1.42E-01

Cross-validation results for classification methods

response	num_features	scoring	best_estimator	best_score
1_min_cat	15	trade Z	SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.029430166
1_min_cat	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0,	0.026225137

			n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
1_min_cat	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.0246300 58
1_min_cat	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0224231 66
1_min_cat	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0221679 12
1_min_cat	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=1, weights='distance')	0.0201035 89
1_min_cat	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='uniform')	0.0199310 47
1_min_cat	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'),	0.0197553 15

			learning_rate=1.0, n_estimators=50, random_state=None)	
1_min_cat	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=14, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0187659 46
1_min_cat	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0182828 88
1_min_cat	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=28, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0178460 45
1_min_cat	8	trade Z	SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0178131 53
1_min_cat	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0173667 33
1_min_cat	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt',	0.0171746 72

			max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
1_min_cat	4	trade Z	SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0170264 83
1_min_cat	8	trade Z	voting_hard	0.0168854 94
1_min_cat	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0167811 57
1_min_cat	15	trade Z	GaussianNB	0.0166041 72
1_min_cat	15	trade Z	voting_soft	0.0157227 36
1_min_cat	15	trade Z	voting_hard	0.0145947 48
1_min_cat	8	trade Z	voting_soft	0.0145198 03
1_min_cat	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=400, random_state=None)	0.0143532 01
1_min_cat	8	trade	DecisionTreeClassifier(class_weight=None,	0.0125074

		Z	criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	17
1_min_cat	15	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0117389 02
1_min_cat	8	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0115678 85
1_min_cat	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0110918 31
1_min_cat	8	trade Z	GaussianNB	0.0100685 74
1_min_cat	4	trade Z	voting_soft	0.0092443 98
1_min_cat	4	trade Z	GaussianNB	0.0078664 48
1_min_cat	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None,	0.0074839 35

			splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	
1_min_cat	4	trade Z	voting_hard	0.0073292 06
1_min_cat	4	trade Z	LogisticRegression(C=0.1, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0070329
1_min_high_cat	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1778017 51
1_min_high_cat	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.1665563 32
1_min_high_cat	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1320372 48
1_min_high_cat	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1,	0.1262225 31

			max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	
1_min_high_c at	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1260337 45
1_min_high_c at	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1130527
1_min_high_c at	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1119343 53
1_min_high_c at	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.1008525 59
1_min_high_c at	8	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3,	0.0993788 07

			gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	
1_min_high_c at	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0953709 05
1_min_high_c at	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0818347 05
1_min_high_c at	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0749140 47
1_min_high_c at	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=2, weights='distance')	0.0682181 71
1_min_high_c at	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.0638819 6

1_min_high_c at	15	trade Z	GaussianNB	0.0521006 5
1_min_high_c at	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0494979 24
1_min_high_c at	8	trade Z	GaussianNB	0.0439645 45
1_min_high_c at	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0387569 52
1_min_high_c at	4	trade Z	SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0362942 64
1_min_high_c at	4	trade Z	SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0362942 64
1_min_high_c at	15	trade Z	SVC(C=1, cache_size=1024, class_weight={0: 100, 2: 100}, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0153339 71
1_min_high_c at	4	trade Z	GaussianNB	0.0150279 34
1_min_high_c at	15	trade Z	LogisticRegression(C=0.1, class_weight=None, dual=False, fit_intercept=True,	0.0137626 39

			intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	
1_min_high_c at	8	trade Z	LogisticRegression(C=0.1, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0064381 31
1_min_high_c at	4	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0
1_min_high_c at	4	trade Z	voting_hard	0
1_min_high_c at	8	trade Z	voting_hard	0
1_min_high_c at	15	trade Z	voting_hard	0
1_min_high_c at	4	trade Z	voting_soft	0
1_min_high_c at	8	trade Z	voting_soft	0
1_min_high_c at	15	trade Z	voting_soft	0
1_min_updown	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0209062 92
1_min_updown	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0,	0.0176325 67

			n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
1_min_updown	8	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0170625 42
1_min_updown	15	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0167298 87
1_min_updown	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0162504 59
1_min_updown	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0161861 46
1_min_updown	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0159052 19
1_min_updown	15	trade	KNeighborsClassifier(algorithm='auto',	0.0156173

n		Z	leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='distance')	13
1_min_updown	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0154124 42
1_min_updown	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	0.0152289 5
1_min_updown	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0151588 96
1_min_updown	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0149684 53
1_min_updown	15	trade Z	voting_soft	0.0135949 46
1_min_updown	4	trade	KNeighborsClassifier(algorithm='auto',	0.0135363

n		Z	leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=2, weights='distance')	7
1_min_updown	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=400, random_state=None)	0.0130085 18
1_min_updown	15	trade Z	voting_hard	0.0121641 04
1_min_updown	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	0.0117060 93
1_min_updown	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=2, weights='uniform')	0.0115467 69
1_min_updown	8	trade Z	voting_hard	0.0107359 18
1_min_updown	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=20, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0105908 95
1_min_updown	8	trade Z	voting_soft	0.0101014 1

1_min_updown	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=38, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0096149 46
1_min_updown	8	trade Z	GaussianNB	0.0064637 45
1_min_updown	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0060554 3
1_min_updown	4	trade Z	GaussianNB	0.0055301 67
1_min_updown	15	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0052172 07
1_min_updown	8	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0051192 05
1_min_updown	15	trade Z	GaussianNB	0.0044855 48
1_min_updown	4	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0027329 89
1_min_updown	4	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100,	0.0026916 87

			multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	
1_min_updown	4	trade Z	voting_hard	0.0025553 31
1_min_updown	4	trade Z	voting_soft	- 0.0006631 14
10_min_cat	4	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0341905 48
10_min_cat	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0268896 17
10_min_cat	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0264592 32
10_min_cat	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0224542 93
10_min_cat	4	trade Z	voting_soft	0.0214731 29
10_min_cat	15	trade Z	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3,	0.0202910 71

			gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	
10_min_cat	4	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0200202 03
10_min_cat	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0187203 06
10_min_cat	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	0.0186235 19
10_min_cat	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0180349 13
10_min_cat	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	0.0177456 44

10_min_cat	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0175557 61
10_min_cat	4	trade Z	voting_hard	0.0165117 87
10_min_cat	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0159171 54
10_min_cat	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.0131701 29
10_min_cat	15	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0127541 98
10_min_cat	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0125081 38

10_min_cat	15	trade Z	GaussianNB	0.0122699 21
10_min_cat	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0119723 07
10_min_cat	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=1, weights='uniform')	0.0111769 64
10_min_cat	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0105548 73
10_min_cat	8	trade Z	SVC(C=0.0001, cache_size=1024, class_weight={0: 100, 2: 100}, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0092715 4
10_min_cat	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weig ht=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.0091953 7
10_min_cat	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt',	0.0089422 8

			max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
10_min_cat	8	trade Z	voting_soft	0.0057957 31
10_min_cat	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='distance')	0.0056878 04
10_min_cat	15	trade Z	voting_hard	0.0055315 82
10_min_cat	8	trade Z	voting_hard	0.0040098 12
10_min_cat	8	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0030071 59
10_min_cat	15	trade Z	voting_soft	0.0009629 21
10_min_cat	4	trade Z	GaussianNB	-9.35E-05
10_min_cat	8	trade Z	GaussianNB	- 0.0007592 18
10_min_high_cat	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.1758083 23
10_min_high_cat	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini',	0.1422992 56

			max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
10_min_high_cat	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.1203224 54
10_min_high_cat	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1202042 44
10_min_high_cat	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1168425 42
10_min_high_cat	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.1020433 28

10_min_high_cat	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0947535 94
10_min_high_cat	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0863388 45
10_min_high_cat	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=1, weights='uniform')	0.0805348 22
10_min_high_cat	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0760420 64
10_min_high_cat	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0738984 04
10_min_high_cat	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0,	0.0714349 13

			n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
10_min_high_cat	8	trade Z	GaussianNB	0.0648059 06
10_min_high_cat	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=1, weights='distance')	0.0644186 03
10_min_high_cat	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0556099 94
10_min_high_cat	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=2, weights='uniform')	0.0471754 89
10_min_high_cat	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.0461928 4
10_min_high_cat	15	trade Z	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0409264 34
10_min_high_cat	4	trade Z	GaussianNB	0.0359713
10_min_high_cat	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=7,	0.0340473 88

			max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	
10_min_high_cat	15	trade Z	GaussianNB	0.0274613 35
10_min_high_cat	8	trade Z	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0271132 82
10_min_high_cat	4	trade Z	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0209621 18
10_min_high_cat	15	trade Z	LogisticRegression(C=1, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0107862 71
10_min_high_cat	4	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0
10_min_high_cat	8	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0
10_min_high_cat	4	trade Z	voting_hard	0
10_min_high_cat	8	trade Z	voting_hard	0

10_min_high_cat	15	trade Z	voting_hard	0
10_min_high_cat	4	trade Z	voting_soft	0
10_min_high_cat	8	trade Z	voting_soft	0
10_min_high_cat	15	trade Z	voting_soft	0
10_min_updown	4	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0248097 32
10_min_updown	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=14, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0162419 26
10_min_updown	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0155574 1
10_min_updown	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0153092 04
10_min_updown	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2,	0.0142633 15

			min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	
10_min_updo wn	15	trade Z	GaussianNB	0.0138718 26
10_min_updo wn	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	0.0138604 22
10_min_updo wn	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=2, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0137095 46
10_min_updo wn	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=1, weights='uniform')	0.0132316 07
10_min_updo wn	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weig ht=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	0.0130453 2
10_min_updo wn	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0127163 95
10_min_updo	4	trade	RandomForestClassifier(bootstrap=True,	0.0120616

wn		Z	class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	88
10_min_updo wn	8	trade Z	GaussianNB	0.0114054 68
10_min_updo wn	4	trade Z	voting_hard	0.0113574 17
10_min_updo wn	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0112060 99
10_min_updo wn	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.0110551 99
10_min_updo wn	15	trade Z	voting_hard	0.0109555 6
10_min_updo wn	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0106679 33
10_min_updo	4	trade	voting_soft	0.0104358

wn		Z		07
10_min_updo wn	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0096548 68
10_min_updo wn	8	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0074097 25
10_min_updo wn	4	trade Z	GaussianNB	0.0070556 76
10_min_updo wn	4	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0064281 17
10_min_updo wn	15	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0059622 34
10_min_updo wn	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=1, weights='uniform')	0.0058407 6
10_min_updo wn	8	trade Z	voting_soft	0.0058387 26
10_min_updo wn	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weig ht=None, criterion='gini', max_depth=1, max_features=None,	0.0058224 69

			max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	
10_min_updo wn	15	trade Z	voting_soft	0.0054013 43
10_min_updo wn	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0028194 59
10_min_updo wn	8	trade Z	voting_hard	0.0025963 94
10_min_updo wn	8	trade Z	SVC(C=0.01, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	- 0.0034461 03
10_min_updo wn	15	trade Z	SVC(C=0.01, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	- 0.0054642 88
20_min_cat	4	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0334358 37
20_min_cat	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1,	0.0241592 17

			oob_score=False, random_state=None, verbose=0, warm_start=False)	
20_min_cat	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0220441 05
20_min_cat	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0215650 54
20_min_cat	4	trade Z	voting_soft	0.0213363 07
20_min_cat	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0196719 09
20_min_cat	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0192260 93
20_min_cat	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None,	0.0179249 45

			min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
20_min_cat	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=14, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0178939 35
20_min_cat	4	trade Z	voting_hard	0.0177311 03
20_min_cat	15	trade Z	SVC(C=0.01, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0173251 24
20_min_cat	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=400, random_state=None)	0.0158261 68
20_min_cat	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0145673 63
20_min_cat	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2,	0.0141852 22

			max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	
20_min_cat	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0125395 16
20_min_cat	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=2, weights='uniform')	0.0114791 34
20_min_cat	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	0.0108309 31
20_min_cat	4	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0098454 98
20_min_cat	8	trade Z	SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True,	0.0095794 72

			tol=0.001, verbose=False)	
20_min_cat	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0071721 71
20_min_cat	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0071721 71
20_min_cat	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=2, weights='uniform')	0.0029718 79
20_min_cat	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=1, weights='uniform')	0.0026368 32
20_min_cat	4	trade Z	GaussianNB	- 0.0033332 13
20_min_cat	15	trade Z	LogisticRegression(C=0.01, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	- 0.0037531 57
20_min_cat	8	trade Z	voting_hard	- 0.0043728 96
20_min_cat	15	trade Z	voting_soft	- 0.0055797 15
20_min_cat	8	trade Z	voting_soft	- 0.0061868 41
20_min_cat	15	trade	voting_hard	-

		Z		0.0062052 83
20_min_cat	8	trade Z	LogisticRegression(C=0.01, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	- 0.0065151 18
20_min_cat	15	trade Z	GaussianNB	- 0.0129953 06
20_min_cat	8	trade Z	GaussianNB	- 0.0139794 16
20_min_high_cat	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.2908616 79
20_min_high_cat	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.1624283 21
20_min_high_cat	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	0.1303026 53
20_min_high_cat	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt', max_leaf_nodes=None,	0.1092327 82

			min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
20_min_high_cat	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1019624 59
20_min_high_cat	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1007705 15
20_min_high_cat	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0966208 43
20_min_high_cat	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=400, random_state=None)	0.0912445 62
20_min_high_cat	4	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False,	0.0706226 02

			fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	
20_min_high_cat	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0665556 08
20_min_high_cat	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=400, random_state=None)	0.0657839 95
20_min_high_cat	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0639468 89
20_min_high_cat	15	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0556065 69
20_min_high_cat	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto',	0.0502163 38

			max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
20_min_high_cat	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0495425 53
20_min_high_cat	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=1, weights='uniform')	0.0486521 71
20_min_high_cat	8	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0466989 68
20_min_high_cat	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0463799 01
20_min_high_cat	15	trade Z	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0364383 44
20_min_high_cat	4	trade Z	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3,	0.0341191 66

			gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	
20_min_high_cat	8	trade Z	SVC(C=0.0001, cache_size=1024, class_weight={0: 100, 2: 100}, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0095794 72
20_min_high_cat	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=2, weights='distance')	0.0020221 42
20_min_high_cat	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=1, weights='uniform')	0
20_min_high_cat	4	trade Z	voting_hard	0
20_min_high_cat	8	trade Z	voting_hard	0
20_min_high_cat	15	trade Z	voting_hard	0
20_min_high_cat	4	trade Z	voting_soft	0
20_min_high_cat	8	trade Z	voting_soft	0
20_min_high_cat	15	trade Z	voting_soft	0
20_min_high_cat	8	trade Z	GaussianNB	- 0.0026361 19
20_min_high_cat	15	trade Z	GaussianNB	- 0.0161335 01
20_min_high_cat	4	trade Z	GaussianNB	- 0.0230156 81
20_min_updown	4	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False,	0.0208947 1

			random_state=None, shrinking=True, tol=0.001, verbose=False)	
20_min_updo wn	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0148153 15
20_min_updo wn	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0137604 09
20_min_updo wn	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0134683 89
20_min_updo wn	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0127166 51
20_min_updo wn	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0116875 08
20_min_updo	43	trade	ExtraTreesClassifier(bootstrap=False,	0.0111113

wn		Z	class_weight=None, criterion='gini', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	26
20_min_updo wn	15	trade Z	SVC(C=0.01, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0104584 01
20_min_updo wn	8	trade Z	SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0095794 72
20_min_updo wn	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0085441 11
20_min_updo wn	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0075393 59
20_min_updo wn	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=2, weights='uniform')	0.0065874
20_min_updo	4	trade	AdaBoostClassifier(algorithm='SAMME.R',	0.0050838

wn		Z	base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	69
20_min_updo wn	15	trade Z	GaussianNB	0.0047652 86
20_min_updo wn	4	trade Z	voting_soft	0.0046262 81
20_min_updo wn	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0030723 74
20_min_updo wn	8	trade Z	GaussianNB	0.0026395 92
20_min_updo wn	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	0.0025029 63
20_min_updo wn	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=2, weights='distance')	1.67E-05
20_min_updo wn	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1,	- 0.0001173 4

			n_neighbors=5, p=2, weights='uniform')	
20_min_updo wn	4	trade Z	GaussianNB	- 0.0009107 24
20_min_updo wn	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	- 0.0020079 9
20_min_updo wn	8	trade Z	LogisticRegression(C=0.1, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	- 0.0028438 8
20_min_updo wn	4	trade Z	voting_hard	- 0.0032916 77
20_min_updo wn	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	- 0.0040528 49
20_min_updo wn	15	trade Z	voting_hard	- 0.0049469 54
20_min_updo wn	15	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	- 0.0056654 01
20_min_updo wn	8	trade Z	voting_hard	- 0.0063873 18

20_min_updown	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=400, random_state=None)	- 0.0065281 23
20_min_updown	15	trade Z	voting_soft	- 0.0069643 24
20_min_updown	8	trade Z	voting_soft	- 0.0095344 07
20_min_updown	4	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	- 0.0104625 46
40_min_cat	4	trade Z	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0389691 83
40_min_cat	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0380603 08
40_min_cat	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=2, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0,	0.0361939 2

			n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
40_min_cat	4	trade Z	GaussianNB	0.0306221 17
40_min_cat	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0301185 08
40_min_cat	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0276656 21
40_min_cat	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0270718 9
40_min_cat	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.0250272 25
40_min_cat	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=2, max_features='auto',	0.0246103 73

			max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
40_min_cat	8	trade Z	GaussianNB	0.0242044 85
40_min_cat	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0224863 1
40_min_cat	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0223038 42
40_min_cat	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0202490 25
40_min_cat	8	trade Z	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0184698 93
40_min_cat	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2,	0.0180512 1

			min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
40_min_cat	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.0179300 56
40_min_cat	15	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0172848 69
40_min_cat	4	trade Z	voting_hard	0.0167725 47
40_min_cat	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=2, weights='distance')	0.0163299 99
40_min_cat	15	trade Z	voting_hard	0.0153985 29
40_min_cat	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0151640 49
40_min_cat	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=2,	0.0144648 18

			weights='uniform')	
40_min_cat	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=400, random_state=None)	0.0144114 52
40_min_cat	15	trade Z	LogisticRegression(C=1, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0135202 99
40_min_cat	8	trade Z	LogisticRegression(C=100.0, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0134061 97
40_min_cat	15	trade Z	GaussianNB	0.0127239 37
40_min_cat	8	trade Z	voting_hard	0.0117308 99
40_min_cat	4	trade Z	voting_soft	0.0114337 52
40_min_cat	15	trade Z	voting_soft	0.0099397 61
40_min_cat	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=1, weights='uniform')	0.0082013 7
40_min_cat	4	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0077830 39

40_min_cat	8	trade Z	voting_soft	0.0026385 08
40_min_high_cat	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3384909 13
40_min_high_cat	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3156430 11
40_min_high_cat	15	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.2792791 31
40_min_high_cat	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.2628696 67
40_min_high_cat	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.2424892 89

40_min_high_cat	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.2374820 92
40_min_high_cat	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.2073240 11
40_min_high_cat	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.2055339 06
40_min_high_cat	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.1645815 45
40_min_high_cat	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=2, weights='uniform')	0.1303962 17
40_min_high_cat	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2,	0.1199276 97

			min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
40_min_high_cat	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1076247 53
40_min_high_cat	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.0791072 99
40_min_high_cat	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	0.0788339 86
40_min_high_cat	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=1, weights='uniform')	0.0538869 86
40_min_high_cat	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=2, weights='uniform')	0.0525931 04

40_min_high_cat	4	trade Z	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0477442
40_min_high_cat	8	trade Z	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0381798 78
40_min_high_cat	4	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0381213 99
40_min_high_cat	8	trade Z	GaussianNB	0.0208009 28
40_min_high_cat	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0192586 09
40_min_high_cat	15	trade Z	GaussianNB	0.0024684 4
40_min_high_cat	8	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0
40_min_high_cat	15	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001,	0

			verbose=0, warm_start=False)	
40_min_high_cat	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0
40_min_high_cat	4	trade Z	voting_hard	0
40_min_high_cat	8	trade Z	voting_hard	0
40_min_high_cat	15	trade Z	voting_hard	0
40_min_high_cat	4	trade Z	voting_soft	0
40_min_high_cat	8	trade Z	voting_soft	0
40_min_high_cat	15	trade Z	voting_soft	0
40_min_high_cat	4	trade Z	GaussianNB	- 0.0113892 19
40_min_updo wn	8	trade Z	GaussianNB	0.0402321 34
40_min_updo wn	8	trade Z	voting_hard	0.0314345 36
40_min_updo wn	15	trade Z	GaussianNB	0.0303296 75
40_min_updo wn	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=2, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0288624 57
40_min_updo wn	4	trade Z	GaussianNB	0.0288203 42
40_min_updo wn	4	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf',	0.0282999 64

			max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	
40_min_updo wn	15	trade Z	voting_hard	0.0266569 5
40_min_updo wn	8	trade Z	LogisticRegression(C=0.1, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0260038 24
40_min_updo wn	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0256821 41
40_min_updo wn	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0255118 4
40_min_updo wn	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0243466 55
40_min_updo wn	15	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001,	0.0238733 5

			verbose=0, warm_start=False)	
40_min_updown	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0225145 31
40_min_updown	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0207872 73
40_min_updown	4	trade Z	voting_hard	0.0206704 71
40_min_updown	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	0.0205602 86
40_min_updown	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0202650 38
40_min_updown	15	trade Z	voting_soft	0.0202554 95
40_min_updown	4	trade Z	voting_soft	0.0191686 61

40_min_updown	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0185665 02
40_min_updown	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.0164909 5
40_min_updown	8	trade Z	voting_soft	0.0161866 01
40_min_updown	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=2, weights='distance')	0.0160489 04
40_min_updown	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0156010 37
40_min_updown	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=2, weights='distance')	0.0147937 23
40_min_updown	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=1, weights='distance')	0.0143541 52
40_min_updown	4	trade	LogisticRegression(C=0.0001, class_weight=None,	0.0133482

wn		Z	dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	13
40_min_updo wn	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0122396 14
40_min_updo wn	15	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0111036 51
40_min_updo wn	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=70, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0101921 14
40_min_updo wn	8	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0096877 48
40_min_updo wn	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50,	0.0094904 84

			random_state=None)	
5_min_cat	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=38, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0269112 3
5_min_cat	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0244755 18
5_min_cat	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=400, random_state=None)	0.0231587 68
5_min_cat	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0229445 59
5_min_cat	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=2, weights='uniform')	0.0212701 23
5_min_cat	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None,	0.0211957 17

			min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
5_min_cat	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0205471 09
5_min_cat	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0201635 46
5_min_cat	8	trade Z	voting_soft	0.0199301 74
5_min_cat	15	trade Z	GaussianNB	0.0197219 41
5_min_cat	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0196488 56
5_min_cat	8	trade Z	voting_hard	0.0189988 87
5_min_cat	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=2, weights='distance')	0.0186954 36
5_min_cat	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini',	0.0183166 54

			max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
5_min_cat	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0179370 19
5_min_cat	8	trade Z	GaussianNB	0.0177106 3
5_min_cat	4	trade Z	SVC(C=1, cache_size=1024, class_weight={0: 100, 2: 100}, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0174603 22
5_min_cat	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.0173587 01
5_min_cat	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0173006 07

5_min_cat	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=52, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0171519 3
5_min_cat	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=400, random_state=None)	0.0159027 26
5_min_cat	4	trade Z	voting_soft	0.0148642 71
5_min_cat	4	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0139664 08
5_min_cat	15	trade Z	voting_soft	0.0130804 25
5_min_cat	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=1, weights='distance')	0.0126918 36
5_min_cat	4	trade Z	voting_hard	0.0122223 01
5_min_cat	15	trade Z	voting_hard	0.0121980 64
5_min_cat	8	trade Z	SVC(C=0.01, cache_size=1024, class_weight={0: 100, 2: 100}, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True,	0.0107200 45

			tol=0.001, verbose=False)	
5_min_cat	15	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0100324 19
5_min_cat	4	trade Z	GaussianNB	0.0092325 43
5_min_cat	8	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0088639 14
5_min_cat	15	trade Z	SVC(C=1, cache_size=1024, class_weight={0: 100, 2: 100}, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0012047 09
5_min_high_cat	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1939736 51
5_min_high_cat	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1361016 93
5_min_high_cat	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini',	0.1326015 56

			max_depth=64, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
5_min_high_c at	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=1, weights='uniform')	0.1222636 74
5_min_high_c at	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.1170618 68
5_min_high_c at	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1119555 39
5_min_high_c at	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1076684 18
5_min_high_c at	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1,	0.0943651 94

			oob_score=False, random_state=None, verbose=0, warm_start=False)	
5_min_high_c at	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0898074 65
5_min_high_c at	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0886850 1
5_min_high_c at	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weig ht=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.0743561 5
5_min_high_c at	4	trade Z	GaussianNB	0.0739646 77
5_min_high_c at	15	trade Z	GaussianNB	0.0712775 55
5_min_high_c at	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weig ht=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100,	0.0616145 28

			random_state=None)	
5_min_high_c at	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	0.0427356 05
5_min_high_c at	8	trade Z	GaussianNB	0.0407621 56
5_min_high_c at	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0395880 26
5_min_high_c at	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=1, weights='uniform')	0.0384509 57
5_min_high_c at	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=2, weights='uniform')	0.0384417 89
5_min_high_c at	15	trade Z	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0382080 86
5_min_high_c at	8	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0323011 97

5_min_high_c at	8	trade Z	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0274256 65
5_min_high_c at	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0244290 5
5_min_high_c at	15	trade Z	LogisticRegression(C=0.01, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0118689 03
5_min_high_c at	4	trade Z	SVC(C=0.0001, cache_size=1024, class_weight={0: 100, 2: 100}, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0097057 53
5_min_high_c at	4	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0
5_min_high_c at	4	trade Z	voting_hard	0
5_min_high_c at	8	trade Z	voting_hard	0
5_min_high_c at	15	trade Z	voting_hard	0
5_min_high_c at	4	trade Z	voting_soft	0
5_min_high_c at	8	trade Z	voting_soft	0
5_min_high_c	15	trade	voting_soft	0

at		Z		
5_min_updown	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0228767 29
5_min_updown	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0191519 62
5_min_updown	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0190996 6
5_min_updown	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0183221 51
5_min_updown	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0,	0.0181127 13

			warm_start=False)	
5_min_updown	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0179886 69
5_min_updown	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0176907 75
5_min_updown	4	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0176812 86
5_min_updown	8	trade Z	GaussianNB	0.0171669 11
5_min_updown	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0170945 96
5_min_updown	15	trade Z	GaussianNB	0.0169926 44
5_min_updown	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='uniform')	0.0163999 1
5_min_updown	8	trade Z	voting_hard	0.0162489 64
5_min_updown	4	trade	AdaBoostClassifier(algorithm='SAMME.R',	0.0158561

n		Z	base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	79
5_min_updown	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0153076 05
5_min_updown	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0152422 09
5_min_updown	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0149180 56
5_min_updown	8	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0149176 14
5_min_updown	15	trade Z	voting_hard	0.0147358 28
5_min_updown	8	trade	KNeighborsClassifier(algorithm='auto',	0.0135958

n		Z	leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='distance')	84
5_min_updown	8	trade Z	voting_soft	0.0128750 73
5_min_updown	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.0128414 79
5_min_updown	4	trade Z	GaussianNB	0.0120906 35
5_min_updown	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=2, weights='uniform')	0.0115630 04
5_min_updown	15	trade Z	SVC(C=0.01, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0113891 39
5_min_updown	4	trade Z	voting_soft	0.0113709 02
5_min_updown	15	trade Z	voting_soft	0.0109926 91
5_min_updown	4	trade Z	voting_hard	0.0105004 6
5_min_updown	8	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0099646 61
5_min_updown	15	trade	AdaBoostClassifier(algorithm='SAMME.R',	0.0096001

n		Z	base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	1
5_min_updown	15	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0076606 59
5_min_updown	4	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0050870 66
80_min_cat	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0745194 59
80_min_cat	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0560405 66
80_min_cat	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	0.0482204 01

80_min_cat	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.0479306 49
80_min_cat	4	trade Z	SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0466871 41
80_min_cat	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.0453293 43
80_min_cat	4	trade Z	voting_soft	0.0452534 92
80_min_cat	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0450251 04
80_min_cat	8	trade Z	voting_soft	0.0448312 15
80_min_cat	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0433811 36
80_min_cat	15	trade Z	voting_soft	0.0432265 54
80_min_cat	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weig ht=None, criterion='gini', max_depth=1,	0.0422287 48

			max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=400, random_state=None)	
80_min_cat	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0417120 02
80_min_cat	8	trade Z	voting_hard	0.0396491 99
80_min_cat	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0395446 84
80_min_cat	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0385179 86
80_min_cat	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=2, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0358193 71
80_min_cat	43	trade	RandomForestClassifier(bootstrap=True,	0.0355124

		Z	class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	39
80_min_cat	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0351887 6
80_min_cat	4	trade Z	voting_hard	0.0350016 43
80_min_cat	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.0340860 18
80_min_cat	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0331047 57
80_min_cat	4	trade Z	GaussianNB	0.0323495 98
80_min_cat	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1,	0.0295241 4

			max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	
80_min_cat	8	trade Z	GaussianNB	0.0294158 95
80_min_cat	15	trade Z	voting_hard	0.0277430 5
80_min_cat	8	trade Z	SVC(C=0.0001, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0245100 95
80_min_cat	15	trade Z	SVC(C=0.0001, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0245100 95
80_min_cat	4	trade Z	LogisticRegression(C=10.0, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0228660 64
80_min_cat	15	trade Z	GaussianNB	0.0138769 01
80_min_cat	15	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0071883 69
80_min_cat	8	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None,	- 0.0059366 2

			solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	
80_min_high_cat	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.7167023 88
80_min_high_cat	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.6491876 18
80_min_high_cat	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.6447873 76
80_min_high_cat	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.6447873 76
80_min_high_cat	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5999146 34

80_min_high_cat	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.3010398 47
80_min_high_cat	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.2782843 11
80_min_high_cat	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.2622724 97
80_min_high_cat	4	trade Z	GaussianNB	0.2141964 2
80_min_high_cat	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	0.2118879 4
80_min_high_cat	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None,	0.1625993 22

			min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
80_min_high_cat	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.1565040 56
80_min_high_cat	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.1449623 44
80_min_high_cat	8	trade Z	GaussianNB	0.1384888 33
80_min_high_cat	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=1, weights='uniform')	0.1274345 73
80_min_high_cat	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.1239221 26
80_min_high_cat	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=1, weights='uniform')	0.1217028 53

80_min_high_cat	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=2, weights='uniform')	0.0666633 34
80_min_high_cat	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0602705 71
80_min_high_cat	15	trade Z	SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0551747 46
80_min_high_cat	8	trade Z	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0511644 9
80_min_high_cat	15	trade Z	GaussianNB	0.0504488 02
80_min_high_cat	4	trade Z	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0458247 21
80_min_high_cat	4	trade Z	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0073051 03
80_min_high_cat	8	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True,	0

			intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	
80_min_high_cat	15	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0
80_min_high_cat	4	trade Z	voting_hard	0
80_min_high_cat	8	trade Z	voting_hard	0
80_min_high_cat	15	trade Z	voting_hard	0
80_min_high_cat	4	trade Z	voting_soft	0
80_min_high_cat	8	trade Z	voting_soft	0
80_min_high_cat	15	trade Z	voting_soft	0
80_min_updown	15	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0420530 87
80_min_updown	8	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.041189
80_min_updown	8	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=2, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0,	0.0403628 65

			n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
80_min_updo wn	4	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0381205 51
80_min_updo wn	15	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0370780 31
80_min_updo wn	4	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0365102 39
80_min_updo wn	43	trade Z	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0364211 53
80_min_updo wn	43	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2,	0.0363594 17

			min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
80_min_updo wn	15	trade Z	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.0352406 15
80_min_updo wn	8	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=2, weights='uniform')	0.0344104 4
80_min_updo wn	4	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='distance')	0.0337780 64
80_min_updo wn	8	trade Z	voting_soft	0.0328483 14
80_min_updo wn	8	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.0326750 37
80_min_updo wn	15	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'),	0.0316620 07

			learning_rate=1.0, n_estimators=400, random_state=None)	
80_min_updown	8	trade Z	GaussianNB	0.0316007 15
80_min_updown	4	trade Z	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0286400 83
80_min_updown	8	trade Z	voting_hard	0.0282058 67
80_min_updown	8	trade Z	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0267999 55
80_min_updown	4	trade Z	voting_soft	0.0264302 67
80_min_updown	15	trade Z	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=2, weights='uniform')	0.0260077 19
80_min_updown	4	trade Z	voting_hard	0.0221868 21
80_min_updown	4	trade Z	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=28, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.0220647 64
80_min_updown	4	trade Z	GaussianNB	0.0219487 33
80_min_updown	15	trade Z	voting_soft	0.0198154 27
80_min_updown	4	trade Z	LogisticRegression(C=0.01, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None,	0.0192617

			solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	
80_min_updo wn	8	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0179873 13
80_min_updo wn	15	trade Z	GaussianNB	0.0177627 51
80_min_updo wn	4	trade Z	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weig ht=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	0.0167338 54
80_min_updo wn	15	trade Z	SVC(C=0.01, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0155271 25
80_min_updo wn	15	trade Z	voting_hard	0.0148640 11
80_min_updo wn	15	trade Z	LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.0145688 29
80_min_updo wn	8	trade Z	SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.0143167 17
1_min_cat	8		LogisticRegression(C=10.0, class_weight=None,	0.4059641

			dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	72
1_min_cat	15		LogisticRegression(C=1, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.4044487 74
1_min_cat	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.4026357 09
1_min_cat	15		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.4025571 15
1_min_cat	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.4024733 45
1_min_cat	8		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf',	0.4022092 08

			max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	
1_min_cat	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.4015532 82
1_min_cat	8		voting_hard	0.4011203 12
1_min_cat	15		voting_hard	0.4000649 46
1_min_cat	8		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3996860 96
1_min_cat	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3990637 01
1_min_cat	15		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3977106 67
1_min_cat	8		voting_soft	0.3974941 82
1_min_cat	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini',	0.3971965 15

			max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
1_min_cat	8		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='distance')	0.3960599 66
1_min_cat	43		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3958976 02
1_min_cat	15		voting_soft	0.3948692 97
1_min_cat	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3943010 23
1_min_cat	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3900254 37
1_min_cat	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='distance')	0.3899171 94

1_min_cat	4	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.3897818 91
1_min_cat	4	SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3887278 21
1_min_cat	4	voting_soft	0.3872652 49
1_min_cat	4	voting_hard	0.3857769 12
1_min_cat	4	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3853439 41
1_min_cat	4	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.3841803 32
1_min_cat	4	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	0.3832873 3
1_min_cat	4	ExtraTreesClassifier(bootstrap=False,	0.3825566

		class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	92
1_min_cat	4	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3773069 22
1_min_cat	8	GaussianNB	0.3767115 87
1_min_cat	15	GaussianNB	0.3731937
1_min_cat	4	GaussianNB	0.3730854 58
1_min_high_cat	4	SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.9084425 37
1_min_high_cat	8	SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.9084425 37
1_min_high_cat	15	SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.9084425 37
1_min_high_cat	8	voting_soft	0.9006332 2
1_min_high_cat	4	LogisticRegression(C=0.01, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100,	0.9005790 98

			multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	
1_min_high_c at	15		voting_soft	0.9005790 98
1_min_high_c at	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9005520 38
1_min_high_c at	4		voting_hard	0.9004708 56
1_min_high_c at	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9004708 56
1_min_high_c at	4		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9004437 95
1_min_high_c at	4		voting_soft	0.9004437 95
1_min_high_c at	15		LogisticRegression(C=0.01, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.9004167 34
1_min_high_c	4		KNeighborsClassifier(algorithm='auto',	0.9004167

at			leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='uniform')	34
1_min_high_c at	8		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='uniform')	0.9004167 34
1_min_high_c at	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='uniform')	0.9004167 34
1_min_high_c at	4		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.9004167 34
1_min_high_c at	8		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.9004167 34
1_min_high_c at	15		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.9004167 34
1_min_high_c at	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0,	0.9004167 34

			warm_start=False)	
1_min_high_cat	43		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9004167 34
1_min_high_cat	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9004167 34
1_min_high_cat	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9004167 34
1_min_high_cat	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9004167 34
1_min_high_cat	8		voting_hard	0.9004167 34
1_min_high_cat	8		LogisticRegression(C=0.01, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.9003896 74

1_min_high_cat	15		voting_hard	0.9003355 52
1_min_high_cat	4		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.9001461 28
1_min_high_cat	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.8992260 65
1_min_high_cat	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.8986307 3
1_min_high_cat	4		GaussianNB	0.8852086 38
1_min_high_cat	8		GaussianNB	0.8771174 97
1_min_high_cat	15		GaussianNB	0.8712994 53
1_min_updown	15		voting_soft	0.5234345 4
1_min_updown	15		voting_hard	0.5231368

n				73
1_min_updown	8		voting_hard	0.522920388
1_min_updown	8		voting_soft	0.522379174
1_min_updown	8		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.522150064
1_min_updown	8		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.522108567
1_min_updown	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.521161444
1_min_updown	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.520863777
1_min_updown	4		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.520809655
1_min_updown	4		GaussianNB	0.5206202

n				31
1_min_updown	15		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.520241381
1_min_updown	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.519889592
1_min_updown	4		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=2, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.519727228
1_min_updown	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=2, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.519673107
1_min_updown	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.519456622

1_min_updown	4	voting_hard	0.519348379
1_min_updown	4	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.519213076
1_min_updown	43	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=2, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.518617741
1_min_updown	15	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='distance')	0.518238892
1_min_updown	15	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.51820712
1_min_updown	4	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.518130649
1_min_updown	8	GaussianNB	0.517995346
1_min_updown	8	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.517860042
1_min_updown	15	GaussianNB	0.517832982
1_min_updown	4	SVC(C=1, cache_size=1024, class_weight=None,	0.5178012

n			coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	29
1_min_updown	4		voting_soft	0.5175894 36
1_min_updown	15		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.5164799 48
1_min_updown	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5163175 84
1_min_updown	8		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.5161281 59
1_min_updown	4		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.5156681 28
1_min_updown	8		AdaBoostClassifier(algorithm='SAMME.R',	0.5153975 21

			base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	
1_min_updown	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.5132597 28
10_min_cat	15		LogisticRegression(C=0.01, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.3987389 73
10_min_cat	8		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.3965741 19
10_min_cat	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3952481 46
10_min_cat	15		voting_hard	0.3949504 79

10_min_cat	8	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.3947069 33
10_min_cat	15	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3930186 71
10_min_cat	8	SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3924968 11
10_min_cat	15	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.3924879 58
10_min_cat	8	voting_hard	0.3913514 1
10_min_cat	15	voting_soft	0.3904313 47
10_min_cat	43	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2,	0.3900795 58

			min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
10_min_cat	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3895112 84
10_min_cat	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3886724 04
10_min_cat	8		voting_soft	0.3885100 4
10_min_cat	8		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3862098 83
10_min_cat	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3853168 8
10_min_cat	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1,	0.3852627 59

			weights='distance')	
10_min_cat	4		SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3844079 79
10_min_cat	15		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3834496 94
10_min_cat	8		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	0.3827190 56
10_min_cat	4		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.3808518 7
10_min_cat	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3802835 96
10_min_cat	4		voting_soft	0.3787681 98
10_min_cat	4		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1,	0.3778481 36

			oob_score=False, random_state=None, verbose=0, warm_start=False)	
10_min_cat	4		DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3771986 79
10_min_cat	4		voting_hard	0.3767927 69
10_min_cat	8		GaussianNB	0.3733560 64
10_min_cat	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3731666 4
10_min_cat	4		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.3729230 94
10_min_cat	4		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	0.3705958 76
10_min_cat	15		GaussianNB	0.3697840 56
10_min_cat	4		GaussianNB	0.3680521 73
10_min_high_cat	8		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0,	0.9072538 56

			decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	
10_min_high_cat	4		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.9071668 79
10_min_high_cat	15		SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.9071088 95
10_min_high_cat	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9007955 84
10_min_high_cat	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9007414 62
10_min_high_cat	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9007414 62

10_min_high_cat	4	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.900714402
10_min_high_cat	8	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.900714402
10_min_high_cat	8	voting_soft	0.900714402
10_min_high_cat	15	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.900687341
10_min_high_cat	43	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.900687341
10_min_high_cat	4	voting_soft	0.900687341
10_min_high_cat	15	voting_hard	0.900687341
10_min_high_cat	4	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski',	0.90066028

			metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='uniform')	
10_min_high_cat	8		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='uniform')	0.9006602 8
10_min_high_cat	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=1, weights='uniform')	0.9006602 8
10_min_high_cat	4		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.9006602 8
10_min_high_cat	8		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.9006602 8
10_min_high_cat	15		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.9006602 8
10_min_high_cat	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9006602 8
10_min_high_cat	4		AdaBoostClassifier(algorithm='SAMME.R',	0.9006602

cat			base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	8
10_min_high_cat	4		voting_hard	0.90066028
10_min_high_cat	8		voting_hard	0.90066028
10_min_high_cat	15		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.90063322
10_min_high_cat	15		voting_soft	0.900606159
10_min_high_cat	4		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.900579098
10_min_high_cat	8		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.900470856
10_min_high_cat	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None,	0.900389674

			splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	
10_min_high_cat	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.8988201 55
10_min_high_cat	4		GaussianNB	0.8868052 17
10_min_high_cat	8		GaussianNB	0.8789846 84
10_min_high_cat	15		GaussianNB	0.8724901 23
10_min_updown	8		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.5270606 7
10_min_updown	4		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.5268178 13
10_min_updown	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=2, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5264653 35
10_min_updown	4		AdaBoostClassifier(algorithm='SAMME.R',	0.5261947

wn			base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	29
10_min_updo wn	4		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5261676 68
10_min_updo wn	15		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.5257617 58
10_min_updo wn	8		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.5254640 9
10_min_updo wn	4		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.5253829 08
10_min_updo wn	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto',	0.5252205 44

			max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
10_min_updown	8		GaussianNB	0.524814634
10_min_updown	4		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.524489906
10_min_updown	15		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.524489906
10_min_updown	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.523975754
10_min_updown	4		voting_hard	0.523461601
10_min_updown	15		voting_hard	0.523326298
10_min_updown	15		GaussianNB	0.522866266
10_min_updown	15		voting_soft	0.522514477
10_min_updown	4		GaussianNB	0.521350869
10_min_updown	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weig	0.521350869

			ht=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	
10_min_updo wn	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weig ht=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.5212967 47
10_min_updo wn	4		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='distance')	0.5212426 26
10_min_updo wn	8		voting_hard	0.5211073 23
10_min_updo wn	43		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5210802 62
10_min_updo wn	4		voting_soft	0.5210802 62
10_min_updo wn	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1,	0.5202684 42

			oob_score=False, random_state=None, verbose=0, warm_start=False)	
10_min_updo wn	8		voting_soft	0.5199166 53
10_min_updo wn	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='distance')	0.5174541 32
10_min_updo wn	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5173188 29
10_min_updo wn	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5150727 93
10_min_updo wn	8		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	0.5136115 17
10_min_updo wn	8		SVC(C=0.01, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.5135683 64
10_min_updo wn	15		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.5095674 36
20_min_cat	15		LogisticRegression(C=0.0001, class_weight=None,	0.3884559

			dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	18
20_min_cat	8		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.3867510 96
20_min_cat	15		voting_hard	0.3852627 59
20_min_cat	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=400, random_state=None)	0.3849921 52
20_min_cat	15		voting_soft	0.3848027 28
20_min_cat	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3847486 06
20_min_cat	8		voting_soft	0.3847486 06
20_min_cat	8		SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf',	0.3843210 02

			max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	
20_min_cat	8		voting_hard	0.3837473 62
20_min_cat	15		SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3827264 29
20_min_cat	43		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3810954 16
20_min_cat	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3799859 28
20_min_cat	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.3792823 51
20_min_cat	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None,	0.3776857 72

			min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
20_min_cat	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3774151 65
20_min_cat	4		SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3761162 01
20_min_cat	8		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3753585 54
20_min_cat	15		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3746820 37
20_min_cat	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3742490 66

20_min_cat	8	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='distance')	0.3709747 25
20_min_cat	15	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.3702440 87
20_min_cat	4	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3700276 02
20_min_cat	8	GaussianNB	0.3694322 67
20_min_cat	4	voting_soft	0.3687286 9
20_min_cat	4	voting_hard	0.3682686 58
20_min_cat	4	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.3679168 7
20_min_cat	4	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3645072 25
20_min_cat	4	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='distance')	0.3635601 02

20_min_cat	4		GaussianNB	0.36307301
20_min_cat	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.362829464
20_min_cat	15		GaussianNB	0.362612978
20_min_cat	4		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	0.36185528
20_min_high_cat	4		SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.909747188
20_min_high_cat	8		SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.909747188
20_min_high_cat	15		SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.909747188
20_min_high_cat	4		voting_hard	0.9026898

cat				31
20_min_high_cat	8		voting_hard	0.9026898 31
20_min_high_cat	15		voting_hard	0.9026898 31
20_min_high_cat	4		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='uniform')	0.9026898 31
20_min_high_cat	8		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='uniform')	0.9026898 31
20_min_high_cat	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='uniform')	0.9026898 31
20_min_high_cat	4		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.9026898 31
20_min_high_cat	8		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.9026898 31
20_min_high_cat	15		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.9026898 31
20_min_high_cat	4		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt',	0.9026898 31

			max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
20_min_high_cat	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9026898 31
20_min_high_cat	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9026898 31
20_min_high_cat	43		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9026898 31
20_min_high_cat	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9026898 31
20_min_high_cat	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini',	0.9026898 31

			max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
20_min_high_cat	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9026898 31
20_min_high_cat	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9026898 31
20_min_high_cat	4		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.9026627 7
20_min_high_cat	4		voting_soft	0.9026627 7
20_min_high_cat	8		voting_soft	0.9026627 7
20_min_high_cat	15		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001,	0.9025545 27

			verbose=0, warm_start=False)	
20_min_high_cat	4		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.9025274 67
20_min_high_cat	8		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.9025004 06
20_min_high_cat	15		voting_soft	0.9023921 63
20_min_high_cat	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.9010661 9
20_min_high_cat	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.9000378 85
20_min_high_cat	4		GaussianNB	0.8906478 32
20_min_high_cat	8		GaussianNB	0.8840450 29
20_min_high_cat	15		GaussianNB	0.8766304 05

20_min_updown	4	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.5218601 41
20_min_updown	4	voting_soft	0.5206472 91
20_min_updown	4	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5190507 12
20_min_updown	4	voting_hard	0.5189154 08
20_min_updown	4	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	0.5185636 2
20_min_updown	4	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.5181847 7
20_min_updown	8	GaussianNB	0.5176435 57
20_min_updown	15	GaussianNB	0.5172376 47
20_min_updown	4	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5167234 94

20_min_updo wn	4	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.5161552 2
20_min_updo wn	4	GaussianNB	0.5153704 61
20_min_updo wn	8	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.5148833 69
20_min_updo wn	15	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.5144503 98
20_min_updo wn	8	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=2, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5142339 12
20_min_updo wn	15	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.5139091 84
20_min_updo wn	43	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt',	0.5136385 78

			max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
20_min_updo wn	4		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.5134762 14
20_min_updo wn	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5127455 76
20_min_updo wn	15		voting_hard	0.5125832 12
20_min_updo wn	8		voting_hard	0.5122314 23
20_min_updo wn	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5114196 03
20_min_updo wn	8		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2,	0.5105807 22

			min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	
20_min_updown	8		SVC(C=0.01, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.5105531 72
20_min_updown	15		voting_soft	0.5104995 4
20_min_updown	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.5087405 96
20_min_updown	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5086594 14
20_min_updown	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5084158 68
20_min_updown	8		voting_soft	0.5080911 4
20_min_updown	15		SVC(C=0.01, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3,	0.5065522 44

			gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	
20_min_updown	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	0.5057639 23
20_min_updown	8		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=5, p=2, weights='uniform')	0.5047897 39
20_min_updown	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=2, weights='uniform')	0.5025437 03
40_min_cat	15		LogisticRegression(C=1, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.3855604 26
40_min_cat	8		SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3842340 25
40_min_cat	15		voting_hard	0.3816095 69
40_min_cat	15		voting_soft	0.3815825 08
40_min_cat	15		SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3,	0.3804650 35

			gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	
40_min_cat	8		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.3803106 56
40_min_cat	8		voting_soft	0.3799588 68
40_min_cat	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.3798776 86
40_min_cat	43		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3798235 64
40_min_cat	8		voting_hard	0.3786599 56
40_min_cat	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3781458 03

40_min_cat	8	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3770363 15
40_min_cat	8	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3764139 2
40_min_cat	15	DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3749797 04
40_min_cat	4	SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3744056 59
40_min_cat	8	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.3740055 2
40_min_cat	8	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1,	0.3734101 86

			n_neighbors=300, p=2, weights='distance')	
40_min_cat	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3730583 97
40_min_cat	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3727877 9
40_min_cat	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3723548 2
40_min_cat	8		GaussianNB	0.3718406 67
40_min_cat	15		GaussianNB	0.3676462 63
40_min_cat	4		GaussianNB	0.3671050 5
40_min_cat	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	0.3669968 07
40_min_cat	4		voting_hard	0.3638848 3
40_min_cat	4		voting_soft	0.3628835 85
40_min_cat	4		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1,	0.3626400 39

			max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	
40_min_cat	4		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3602045 79
40_min_cat	4		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.3596363 05
40_min_cat	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3569031 77
40_min_cat	4		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3557936 89
40_min_cat	4		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100,	0.3520593 17

			random_state=None)	
40_min_high_cat	4		SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.9104430 01
40_min_high_cat	8		SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.9104430 01
40_min_high_cat	15		SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.9104430 01
40_min_high_cat	8		voting_hard	0.9038263 79
40_min_high_cat	15		voting_hard	0.9038263 79
40_min_high_cat	15		LogisticRegression(C=0.01, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.9038263 79
40_min_high_cat	4		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='uniform')	0.9038263 79
40_min_high_cat	8		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='uniform')	0.9038263 79
40_min_high_cat	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1,	0.9038263 79

			weights='uniform')	
40_min_high_cat	4		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.903826379
40_min_high_cat	8		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.903826379
40_min_high_cat	15		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.903826379
40_min_high_cat	4		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.903826379
40_min_high_cat	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.903826379
40_min_high_cat	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini',	0.903826379

			max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
40_min_high_cat	43		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9038263 79
40_min_high_cat	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9038263 79
40_min_high_cat	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9038263 79
40_min_high_cat	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9038263 79
40_min_high_cat	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto',	0.9038263 79

			max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
40_min_high_cat	4		voting_soft	0.9038263 79
40_min_high_cat	8		voting_soft	0.9037993 18
40_min_high_cat	15		voting_soft	0.9037722 57
40_min_high_cat	4		voting_hard	0.9037722 57
40_min_high_cat	4		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.9037181 36
40_min_high_cat	8		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.9036369 54
40_min_high_cat	4		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.9027710 13
40_min_high_cat	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2,	0.9022568 6

			min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	
40_min_high_cat	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.9021756 78
40_min_high_cat	4		GaussianNB	0.8930562 32
40_min_high_cat	8		GaussianNB	0.8861828 22
40_min_high_cat	15		GaussianNB	0.8793364 72
40_min_updown	4		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.5222660 33
40_min_updown	4		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=2, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5207284 73
40_min_updown	8		GaussianNB	0.5205119 88
40_min_updown	4		voting_hard	0.5198354 71
40_min_updown	4		GaussianNB	0.5195378 04
40_min_updown	4		voting_soft	0.5191318

wn				94
40_min_updo wn	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5184553 77
40_min_updo wn	8		voting_hard	0.5181847 7
40_min_updo wn	43		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=32, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5179682 85
40_min_updo wn	4		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.5173188 29
40_min_updo wn	4		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	0.5169129 19
40_min_updo wn	8		voting_soft	0.5166152 51
40_min_updo wn	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0,	0.5163717 05

			n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
40_min_updo wn	4		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.5162093 41
40_min_updo wn	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5161010 99
40_min_updo wn	8		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='uniform')	0.5159116 74
40_min_updo wn	15		voting_soft	0.5159116 74
40_min_updo wn	15		DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=10, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.5157493 1
40_min_updo wn	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weig ht=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50,	0.5148021 87

			random_state=None)	
40_min_updo wn	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5147210 04
40_min_updo wn	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weig ht=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.5146939 44
40_min_updo wn	15		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.5144233 37
40_min_updo wn	8		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.5142880 34
40_min_updo wn	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=2, weights='distance')	0.5140986 09
40_min_updo wn	4		DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=14, max_features=None,	0.5140715 48

			max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	
40_min_updo wn	15		voting_hard	0.5139091 84
40_min_updo wn	8		DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.5130703 04
40_min_updo wn	15		GaussianNB	0.5130161 82
40_min_updo wn	8		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.5127565 81
40_min_updo wn	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5119337 55
40_min_updo wn	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5115819 67
40_min_updo wn	15		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False,	0.5109300 71

			random_state=None, shrinking=True, tol=0.001, verbose=False)	
5_min_cat	15		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.4030416 19
5_min_cat	8		LogisticRegression(C=0.01, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.4019862 53
5_min_cat	15		voting_hard	0.4012556 15
5_min_cat	8		voting_hard	0.3999296 42
5_min_cat	8		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3995709 15
5_min_cat	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3989283 97
5_min_cat	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None,	0.3987389 73

			splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	
5_min_cat	8		voting_soft	0.3985766 09
5_min_cat	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3984413 05
5_min_cat	15		voting_soft	0.3976565 46
5_min_cat	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.3974671 21
5_min_cat	43		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3963305 73
5_min_cat	15		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3958705 42

5_min_cat	8	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3941386 59
5_min_cat	15	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3933538 99
5_min_cat	15	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3926417 72
5_min_cat	8	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.3919196 84
5_min_cat	4	SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3912501 45
5_min_cat	8	DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3900524 98
5_min_cat	15	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski',	0.3868052 17

			metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	
5_min_cat	4		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.3862910 65
5_min_cat	4		voting_hard	0.3853439 41
5_min_cat	4		voting_soft	0.3852898 2
5_min_cat	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3849109 7
5_min_cat	4		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3844238 78
5_min_cat	4		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.3834226 34
5_min_cat	8		GaussianNB	0.3817178

				11
5_min_cat	4		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.381420144
5_min_cat	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.380012989
5_min_cat	4		GaussianNB	0.376386859
5_min_cat	15		GaussianNB	0.376062131
5_min_cat	4		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.375439736
5_min_high_cat	8		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.909573234
5_min_high_cat	4		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.909399281
5_min_high_cat	15		SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True,	0.909370289

			tol=0.001, verbose=False)	
5_min_high_c at	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9013367 97
5_min_high_c at	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9013367 97
5_min_high_c at	43		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9013097 36
5_min_high_c at	15		voting_hard	0.9013097 36
5_min_high_c at	4		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='distance')	0.9012826 76
5_min_high_c at	8		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=1, weights='uniform')	0.9012826 76
5_min_high_c at	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=2,	0.9012826 76

			weights='distance')	
5_min_high_cat	4		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9012826 76
5_min_high_cat	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9012826 76
5_min_high_cat	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9012826 76
5_min_high_cat	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=4, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9012556 15
5_min_high_cat	8		voting_hard	0.9012556 15
5_min_high_cat	4		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None,	0.9012285 54

			splitter='best')	
5_min_high_c at	8		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.9012285 54
5_min_high_c at	15		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.9012285 54
5_min_high_c at	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9012285 54
5_min_high_c at	4		voting_soft	0.9012285 54
5_min_high_c at	8		voting_soft	0.9011473 72
5_min_high_c at	4		voting_hard	0.9011473 72
5_min_high_c at	4		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.9011203 12
5_min_high_c at	15		LogisticRegression(C=0.01, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.9010932 51
5_min_high_c	4		AdaBoostClassifier(algorithm='SAMME.R',	0.9010932

at			base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	51
5_min_high_cat	15		voting_soft	0.90106619
5_min_high_cat	8		LogisticRegression(C=0.01, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.90103913
5_min_high_cat	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.900849705
5_min_high_cat	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.900552038
5_min_high_cat	4		GaussianNB	0.885019213
5_min_high_cat	8		GaussianNB	0.8755479

at				79
5_min_high_cat	15		GaussianNB	0.869324024
5_min_updown	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=2, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.530822103
5_min_updown	8		GaussianNB	0.53030795
5_min_updown	4		DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.529631434
5_min_updown	15		DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.529333766
5_min_updown	8		DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.529306706
5_min_updown	8		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.529279645

5_min_updown	4	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.52906316
5_min_updown	15	LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.529009038
5_min_updown	15	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.529009038
5_min_updown	4	voting_soft	0.528359582
5_min_updown	4	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.528180448
5_min_updown	15	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.527656005
5_min_updown	8	voting_hard	0.5274395

n				19
5_min_updown	4		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.527385398
5_min_updown	4		voting_hard	0.527141852
5_min_updown	15		voting_hard	0.526871245
5_min_updown	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.526519457
5_min_updown	15		GaussianNB	0.526330032
5_min_updown	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.526194729
5_min_updown	8		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.526035023
5_min_updown	4		GaussianNB	0.525951183
5_min_updown	4		AdaBoostClassifier(algorithm='SAMME.R',	0.525951183

			base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=200, random_state=None)	
5_min_updown	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.525626455
5_min_updown	15		voting_soft	0.525328787
5_min_updown	8		voting_soft	0.525193484
5_min_updown	43		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.525112302
5_min_updown	4		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='distance')	0.522839205
5_min_updown	8		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='uniform')	0.521729718
5_min_updown	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1,	0.520836716

			weights='uniform')	
5_min_updown	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5207825 95
5_min_updown	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.5199978 35
5_min_updown	15		SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.5180911 52
80_min_cat	15		voting_hard	0.3897007 09
80_min_cat	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3875358 55
80_min_cat	8		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=5, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0,	0.3867510 96

			presort=False, random_state=None, splitter='best')	
80_min_cat	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3853710 02
80_min_cat	15		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.3846944 85
80_min_cat	15		voting_soft	0.3846403 64
80_min_cat	8		voting_hard	0.3830708 45
80_min_cat	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=2, weights='distance')	0.3829896 63
80_min_cat	8		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='distance')	0.3812577 8
80_min_cat	8		voting_soft	0.3809871 73
80_min_cat	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3803918 39
80_min_cat	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weig	0.3802294 74

			ht=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=400, random_state=None)	
80_min_cat	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=100, random_state=None)	0.3791199 87
80_min_cat	43		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3780375 6
80_min_cat	15		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=3, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3775234 07
80_min_cat	8		SVC(C=0.01, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3759712 4
80_min_cat	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini',	0.3756291 61

			max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
80_min_cat	15		SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3729850 4
80_min_cat	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3714076 96
80_min_cat	8		LogisticRegression(C=0.1, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.3684310 22
80_min_cat	15		GaussianNB	0.3677545 06
80_min_cat	8		GaussianNB	0.3651025 6
80_min_cat	4		SVC(C=1, cache_size=1024, class_weight='balanced', coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.3595906 3
80_min_cat	4		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=300, p=1, weights='distance')	0.3549006 87
80_min_cat	4		voting_soft	0.3521675

				6
80_min_cat	4		DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.3520593 17
80_min_cat	4		voting_hard	0.3513016 18
80_min_cat	4		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3486496 73
80_min_cat	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.3473507 6
80_min_cat	4		GaussianNB	0.3466471 83
80_min_cat	4		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.3463224 55
80_min_cat	4		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1,	0.3382313 15

			max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	
80_min_high_cat	4		SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.9093992 81
80_min_high_cat	8		SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.9093992 81
80_min_high_cat	15		SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.9093992 81
80_min_high_cat	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=4, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9044487 74
80_min_high_cat	4		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.9044217 13
80_min_high_cat	4		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1,	0.9044217 13

			weights='uniform')	
80_min_high_cat	8		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='uniform')	0.9044217 13
80_min_high_cat	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=1, weights='uniform')	0.9044217 13
80_min_high_cat	4		DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.9044217 13
80_min_high_cat	8		DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.9044217 13
80_min_high_cat	15		DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.9044217 13
80_min_high_cat	4		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9044217 13
80_min_high_cat	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini',	0.9044217 13

			max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
80_min_high_cat	43		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=1, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9044217 13
80_min_high_cat	4		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9044217 13
80_min_high_cat	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9044217 13
80_min_high_cat	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.9044217 13
80_min_high_cat	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=1, max_features='auto',	0.9044217 13

			max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
80_min_high_cat	4		voting_soft	0.9044217 13
80_min_high_cat	4		voting_hard	0.9044217 13
80_min_high_cat	8		voting_hard	0.9044217 13
80_min_high_cat	15		voting_hard	0.9043946 53
80_min_high_cat	15		voting_soft	0.9043946 53
80_min_high_cat	8		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.9043675 92
80_min_high_cat	15		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.9043675 92
80_min_high_cat	8		voting_soft	0.9042864 1
80_min_high_cat	4		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.9035016 51
80_min_high_cat	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight	0.9026627 7

			ht=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	
80_min_high_cat	15		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.9015262 22
80_min_high_cat	4		GaussianNB	0.8947610 54
80_min_high_cat	8		GaussianNB	0.8882394 33
80_min_high_cat	15		GaussianNB	0.8838826 65
80_min_updown	15		DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=7, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.5205661 09
80_min_updown	8		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=1, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.5186177 41

80_min_updown	4	ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=8, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.51859068
80_min_updown	8	voting_soft	0.518401256
80_min_updown	8	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=100, p=2, weights='uniform')	0.518076528
80_min_updown	15	AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=2, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=400, random_state=None)	0.517643557
80_min_updown	43	RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.517562375
80_min_updown	4	KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=2, weights='distance')	0.517183525
80_min_updown	4	SVC(C=1, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf',	0.516786501

			max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	
80_min_updo wn	15		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=16, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=10, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5163987 66
80_min_updo wn	15		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=64, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5159387 35
80_min_updo wn	8		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=8, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5158304 92
80_min_updo wn	4		voting_soft	0.5152080 97
80_min_updo wn	8		DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=14, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.5151810 36
80_min_updo wn	8		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=32, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2,	0.5146127 62

			min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	
80_min_updo wn	8		GaussianNB	0.5144233 37
80_min_updo wn	4		RandomForestClassifier(bootstrap=True, class_weight=None, criterion='gini', max_depth=64, max_features='sqrt', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=100, n_jobs=1, oob_score=False, random_state=None, verbose=0, warm_start=False)	0.5134220 92
80_min_updo wn	8		voting_hard	0.5133138 5
80_min_updo wn	4		DecisionTreeClassifier(class_weight=None, criterion='entropy', max_depth=20, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best')	0.5131785 46
80_min_updo wn	4		voting_hard	0.5130973 64
80_min_updo wn	4		AdaBoostClassifier(algorithm='SAMME.R', base_estimator=DecisionTreeClassifier(class_weight=None, criterion='gini', max_depth=4, max_features=None, max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, presort=False, random_state=None, splitter='best'), learning_rate=1.0, n_estimators=50, random_state=None)	0.5130161 82
80_min_updo wn	43		ExtraTreesClassifier(bootstrap=False, class_weight=None, criterion='gini', max_depth=16, max_features='auto', max_leaf_nodes=None, min_samples_leaf=1, min_samples_split=2, min_weight_fraction_leaf=0.0, n_estimators=30, n_jobs=1,	0.5126373 33

			oob_score=False, random_state=None, verbose=0, warm_start=False)	
80_min_updo wn	15		KNeighborsClassifier(algorithm='auto', leaf_size=30, metric='minkowski', metric_params=None, n_jobs=1, n_neighbors=25, p=1, weights='distance')	0.5120961 2
80_min_updo wn	15		voting_soft	0.5101477 51
80_min_updo wn	4		GaussianNB	0.5092547 49
80_min_updo wn	15		GaussianNB	0.5092547 49
80_min_updo wn	8		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.5089570 82
80_min_updo wn	15		voting_hard	0.5074958 06
80_min_updo wn	4		LogisticRegression(C=0.0001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100, multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	0.5073875 63
80_min_updo wn	8		SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.5064362 75
80_min_updo wn	15		SVC(C=0.0001, cache_size=1024, class_weight=None, coef0=0.0, decision_function_shape=None, degree=3, gamma='auto', kernel='rbf', max_iter=-1, probability=False, random_state=None, shrinking=True, tol=0.001, verbose=False)	0.5064362 75
80_min_updo wn	15		LogisticRegression(C=0.001, class_weight=None, dual=False, fit_intercept=True, intercept_scaling=1, max_iter=100,	0.5059533 47

			multi_class='ovr', n_jobs=1, penalty='l2', random_state=None, solver='liblinear', tol=0.0001, verbose=0, warm_start=False)	
--	--	--	---	--

Model fit statistics

score:dfscr period:1 var_type:return	in-sample buys: 57 sells: 4 %up: 85.25% mean: 0.000913272339701 std: 0.000977944852889 trade_z: 0.933868956929	out-of-sample buys: 22 sells: 1 %up: 39.13% mean: -0.000109574673595 std: 0.00258754285542 trade_z: - 0.0423469985685
score:dfscr period:1 var_type:updown	in-sample buys: 20387 sells: 22732 %up: 53.46% mean: 8.3690983863e- 06 std: 0.000417485735852 trade_z: 0.0200464295366 raw_accuracy: 53.46%	out-of-sample buys: 7101 sells: 6446 %up: 51.69% mean: -2.87087204245e- 06 std: 0.000520244080059 trade_z: -0.00551831755995 raw_accuracy: 51.69%
score:dfscr period:1 var_type:cat	in-sample buys: 12084 sells: 11670 %up: 52.85% mean: 3.49153784918e- 06 std: 0.000502849818862 trade_z: 0.00694350026234 raw_accuracy: 40.99%	out-of-sample buys: 4490 sells: 4421 %up: 52.31% mean: -8.38912432874e- 07 std: 0.000593657235561 trade_z: -0.00141312592961 raw_accuracy: 39.37%
score:dfscr period:1 var_type:high_cat	in-sample buys: 0 sells: 0 %up: 0.00% mean: nan std: nan trade_z: nan raw_accuracy: 89.67%	out-of-sample buys: 0 sells: 0 %up: 0.00% mean: nan std: nan trade_z: nan raw_accuracy: 89.71%
score:trade_z period:1 var_type:return	in-sample buys: 47 sells: 1042 %up: 60.61% mean: 0.000113491104059 std: 0.000670637281491 trade_z: 0.169228742856	out-of-sample buys: 30 sells: 444 %up: 55.91% mean: 4.88527760391e- 05 std: 0.00104080020932 trade_z: 0.0469377077383
score:trade_z period:1 var_type:updown	in-sample buys: 21568 sells: 21551 %up: 100.00% mean: 0.000294344914513 std: 0.00029618143937 trade_z: 0.993799324966 raw_accuracy: 100.00%	out-of-sample buys: 6962 sells: 6585 %up: 51.69% mean: 3.47308865222e- 06 std: 0.000520240407999 trade_z: 0.0066759302023 raw_accuracy: 51.69%
score:trade_z period:1 var_type:cat	in-sample buys: 11507 sells: 12170 %up: 59.89% mean: 8.56230887306e- 05 std: 0.000498940129782 trade_z: 0.171609946003 raw_accuracy: 46.25%	out-of-sample buys: 5076 sells: 5191 %up: 52.49% mean: 9.89298706811e- 06 std: 0.000567096075312 trade_z: 0.017444993007 raw_accuracy: 38.26%
score:trade_z period:1 var_type:high_cat	in-sample buys: 2146 sells: 2263 %up: 100.00% mean: 0.000939171232172 std: 0.000413424470168 trade_z: 2.27168757522 raw_accuracy: 99.90%	out-of-sample buys: 26 sells: 53 %up: 53.16% mean: 0.000129333862362 std: 0.00200624935326 trade_z: 0.0644654973477 raw_accuracy: 89.67%
score:dfscr period:5	in-sample buys: 2865 sells: 40253 %up: 51.27% mean: 2.90620357824e-	out-of-sample buys: 1008 sells: 12537 %up: 50.52% mean: 1.84188431864e-

var_type:return	05 std: 0.0009076364367 trade_z: 0.032019467936	05 std: 0.00110972245053 trade_z: 0.0165977025856
score:dfscr period:5 var_type:updown	in-sample buys: 19779 sells: 23340 %up: 53.74% mean: 1.95132781616e-05 std: 0.000907886785316 trade_z: 0.0214930743317 raw_accuracy: 53.74%	out-of-sample buys: 6674 sells: 6873 %up: 51.44% mean: -2.1191849074e-05 std: 0.00110970669135 trade_z: -0.0190968021003 raw_accuracy: 51.44%
score:dfscr period:5 var_type:cat	in-sample buys: 11089 sells: 11455 %up: 54.02% mean: 2.71430739948e-05 std: 0.00108226116879 trade_z: 0.0250799666268 raw_accuracy: 41.06%	out-of-sample buys: 4045 sells: 4416 %up: 51.09% mean: -3.02340748959e-05 std: 0.00127029444314 trade_z: -0.0238008400802 raw_accuracy: 37.84%
score:dfscr period:5 var_type:high_cat	in-sample buys: 44 sells: 39 %up: 98.80% mean: 0.00242973337701 std: 0.00141363270133 trade_z: 1.71878690604 raw_accuracy: 89.88%	out-of-sample buys: 7 sells: 2 %up: 55.56% mean: -0.000287881393278 std: 0.000944156418066 trade_z: -0.30490858058 raw_accuracy: 89.66%
score:trade_z period:5 var_type:return	in-sample buys: 2955 sells: 1442 %up: 55.45% mean: 0.000158411723008 std: 0.00110019452654 trade_z: 0.143985194606	out-of-sample buys: 1066 sells: 374 %up: 53.96% mean: 8.7452952648e-05 std: 0.00156710722375 trade_z: 0.0558053407723
score:trade_z period:5 var_type:updown	in-sample buys: 21335 sells: 21784 %up: 100.00% mean: 0.00063969627449 std: 0.000644529578616 trade_z: 0.992501035971 raw_accuracy: 100.00%	out-of-sample buys: 6502 sells: 7045 %up: 51.44% mean: 1.72981040082e-05 std: 0.00110977422116 trade_z: 0.0155870479584 raw_accuracy: 51.44%
score:trade_z period:5 var_type:cat	in-sample buys: 14414 sells: 14808 %up: 99.49% mean: 0.000871381355649 std: 0.00066868325037 trade_z: 1.30667678001 raw_accuracy: 99.48%	out-of-sample buys: 4903 sells: 4892 %up: 50.05% mean: 4.39532861766e-07 std: 0.00115127680282 trade_z: 0.000381778613702 raw_accuracy: 34.11%
score:trade_z period:5 var_type:high_cat	in-sample buys: 480 sells: 524 %up: 99.90% mean: 0.00228521473718 std: 0.00112708727209 trade_z: 2.02754018589 raw_accuracy: 92.02%	out-of-sample buys: 53 sells: 59 %up: 55.36% mean: 0.000404677402004 std: 0.00325466708318 trade_z: 0.124337571758 raw_accuracy: 89.47%
score:dfscr period:10 var_type:return	in-sample buys: 4319 sells: 38798 %up: 51.12% mean: 5.10940182711e-05 std: 0.00125429207782 trade_z: 0.0407353432063	out-of-sample buys: 1511 sells: 12028 %up: 50.36% mean: 2.54370914081e-05 std: 0.00154155326695 trade_z: 0.0165009487207
score:dfscr period:10 var_type:updown	in-sample buys: 20104 sells: 23015 %up: 53.03% mean: 1.45013294618e-05 std: 0.00125523000318 trade_z: 0.0115527269306 raw_accuracy: 53.03%	out-of-sample buys: 6364 sells: 7183 %up: 50.32% mean: -5.9152338621e-05 std: 0.0015402542545 trade_z: -0.0384042689368 raw_accuracy: 50.32%

score:dfscr period:10 var_type:cat	in-sample buys: 10653 sells: 13650 %up: 53.58% mean: 4.6891630335e-05 std: 0.00144817956121 trade_z: 0.0323797073174 raw_accuracy: 40.86%	out-of-sample buys: 3967 sells: 5072 %up: 49.20% mean: -6.43616714778e-05 std: 0.0017374847627 trade_z: -0.0370430134753 raw_accuracy: 36.70%
score:dfscr period:10 var_type:high_cat	in-sample buys: 20 sells: 34 %up: 98.15% mean: 0.00328566870036 std: 0.0013585175972 trade_z: 2.41856911322 raw_accuracy: 89.82%	out-of-sample buys: 0 sells: 10 %up: 50.00% mean: 0.000516589979197 std: 0.00200929410934 trade_z: 0.25710023077 raw_accuracy: 89.72%
score:trade_z period:10 var_type:return	in-sample buys: 2956 sells: 400 %up: 54.47% mean: 0.000231499681635 std: 0.00139337651903 trade_z: 0.166142947347	out-of-sample buys: 1031 sells: 213 %up: 48.55% mean: -6.15344780173e-05 std: 0.00221336590509 trade_z: -0.0278013128673
score:trade_z period:10 var_type:updown	in-sample buys: 18876 sells: 24243 %up: 54.81% mean: 6.8568206033e-05 std: 0.00125343964609 trade_z: 0.0547040348107 raw_accuracy: 54.81%	out-of-sample buys: 5127 sells: 8420 %up: 49.86% mean: -5.09412087971e-06 std: 0.00154138135255 trade_z: -0.0033049062591 raw_accuracy: 49.86%
score:trade_z period:10 var_type:cat	in-sample buys: 11676 sells: 13217 %up: 56.32% mean: 0.000114832247069 std: 0.00140735312726 trade_z: 0.0815944803368 raw_accuracy: 40.72%	out-of-sample buys: 4091 sells: 7522 %up: 50.19% mean: -5.34913112108e-06 std: 0.00159656902605 trade_z: -0.00335039139166 raw_accuracy: 34.83%
score:trade_z period:10 var_type:high_cat	in-sample buys: 72 sells: 83 %up: 74.84% mean: 0.00160596407116 std: 0.00231890717534 trade_z: 0.692552116031 raw_accuracy: 89.71%	out-of-sample buys: 22 sells: 40 %up: 46.77% mean: -0.00121687130035 std: 0.00455384145486 trade_z: -0.267218635609 raw_accuracy: 89.64%
score:dfscr period:20 var_type:return	in-sample buys: 64 sells: 43054 %up: 50.64% mean: 3.97521779146e-05 std: 0.00174765973271 trade_z: 0.0227459482933	out-of-sample buys: 24 sells: 13522 %up: 50.22% mean: 2.11726800475e-05 std: 0.0021806120455 trade_z: 0.00970951256148
score:dfscr period:20 var_type:updown	in-sample buys: 17687 sells: 25432 %up: 55.07% mean: 0.000117512236424 std: 0.00174414012237 trade_z: 0.0673754562016 raw_accuracy: 55.07%	out-of-sample buys: 3953 sells: 9594 %up: 50.20% mean: -1.167538153e-05 std: 0.00218077641884 trade_z: -0.00535377282565 raw_accuracy: 50.20%
score:dfscr period:20 var_type:cat	in-sample buys: 9975 sells: 12073 %up: 52.59% mean: 4.76299269024e-05 std: 0.00204268699776 trade_z: 0.0233172908794 raw_accuracy: 40.08%	out-of-sample buys: 3687 sells: 4644 %up: 48.01% mean: -0.000112654856303 std: 0.00250870922147 trade_z: -0.0449055057235 raw_accuracy: 36.87%

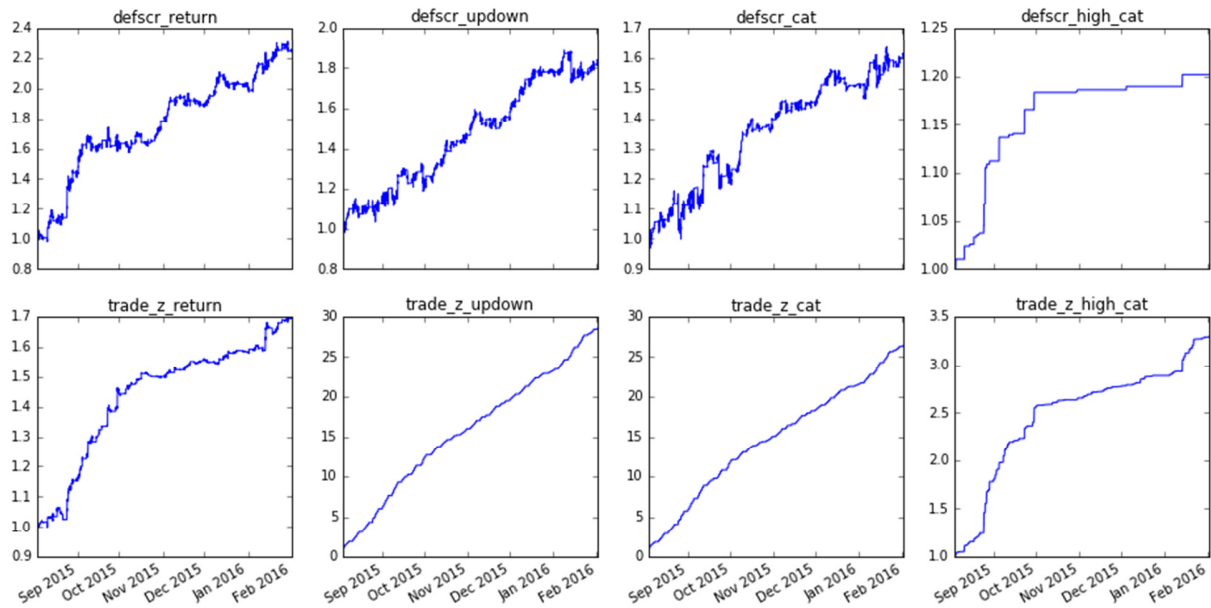
score:defschr period:20 var_type:high_c at	in-sample buys: 0 sells: 0 %up: 0.00% mean: nan std: nan trade_z: nan raw_accuracy: 89.75%	out-of-sample buys: 0 sells: 0 %up: 0.00% mean: nan std: nan trade_z: nan raw_accuracy: 89.84%
score:trade_z period:20 var_type:return	in-sample buys: 0 sells: 39277 %up: 50.82% mean: 4.63456027505e-05 std: 0.00174026586514 trade_z: 0.0266313347166	out-of-sample buys: 0 sells: 12456 %up: 50.29% mean: 1.92517276372e- 05 std: 0.00217407932624 trade_z: 0.00885511738457
score:trade_z period:20 var_type:updown	in-sample buys: 17687 sells: 25432 %up: 55.07% mean: 0.000117512236424 std: 0.00174414012237 trade_z: 0.0673754562016 raw_accuracy: 55.07%	out-of-sample buys: 3953 sells: 9594 %up: 50.20% mean: -1.167538153e-05 std: 0.00218077641884 trade_z: - 0.00535377282565 raw_accuracy: 50.20%
score:trade_z period:20 var_type:cat	in-sample buys: 11943 sells: 12552 %up: 56.95% mean: 0.000204681729635 std: 0.00195441369337 trade_z: 0.104727944923 raw_accuracy: 41.33%	out-of-sample buys: 3643 sells: 7813 %up: 50.14% mean: 2.05130069008e- 05 std: 0.00225273925231 trade_z: 0.00910580613347 raw_accuracy: 35.23%
score:trade_z period:20 var_type:high_c at	in-sample buys: 0 sells: 0 %up: 0.00% mean: nan std: nan trade_z: nan raw_accuracy: 89.75%	out-of-sample buys: 0 sells: 0 %up: 0.00% mean: nan std: nan trade_z: nan raw_accuracy: 89.84%
score:defschr period:40 var_type:return	in-sample buys: 212 sells: 42906 %up: 50.74% mean: 7.32659428846e- 05 std: 0.00245844202714 trade_z: 0.0298017777421	out-of-sample buys: 127 sells: 13419 %up: 50.13% mean: 4.3801095269e-05 std: 0.00309632049703 trade_z: 0.0141461761827
score:defschr period:40 var_type:updown	in-sample buys: 13997 sells: 29122 %up: 55.29% mean: 0.000198145958758 std: 0.00245153442374 trade_z: 0.0808252810319 raw_accuracy: 55.29%	out-of-sample buys: 4326 sells: 9221 %up: 50.55% mean: -6.9859542011e- 06 std: 0.00309650860241 trade_z: - 0.00225607453364 raw_accuracy: 50.55%
score:defschr period:40 var_type:cat	in-sample buys: 10227 sells: 13644 %up: 53.32% mean: 0.000140692248614 std: 0.00277343706773 trade_z: 0.0507284806462 raw_accuracy: 40.26%	out-of-sample buys: 3776 sells: 5182 %up: 47.19% mean: - 0.000189340139201 std: 0.00342642421536 trade_z: - 0.0552588142333 raw_accuracy: 35.21%
score:defschr period:40 var_type:high_c at	in-sample buys: 0 sells: 0 %up: 0.00% mean: nan std: nan trade_z: nan raw_accuracy: 89.80%	out-of-sample buys: 0 sells: 0 %up: 0.00% mean: nan std: nan trade_z: nan raw_accuracy: 89.89%
score:trade_z period:40 var_type:return	in-sample buys: 11123 sells: 31989 %up: 52.07% mean: 0.000161039920424 std:	out-of-sample buys: 3579 sells: 9965 %up: 48.81% mean: -3.67641704561e- 05 std: 0.00309473336203 trade_z: -

	0.00245394691412 trade_z: 0.0656248590779	0.0118795922476
score:trade_z period:40 var_type:updown	in-sample buys: 19255 sells: 23864 %up: 53.45% mean: 0.000142018262163 std: 0.00245542544334 trade_z: 0.0578385560631 raw_accuracy: 53.45%	out-of-sample buys: 7051 sells: 6496 %up: 50.00% mean: -2.15840444262e- 05 std: 0.00309644125192 trade_z: - 0.00697059710493 raw_accuracy: 50.00%
score:trade_z period:40 var_type:cat	in-sample buys: 12354 sells: 8333 %up: 54.62% mean: 0.000136713623136 std: 0.00276907788134 trade_z: 0.049371534133 raw_accuracy: 39.08%	out-of-sample buys: 8691 sells: 3654 %up: 49.92% mean: -9.18188358938e- 05 std: 0.00316198866966 trade_z: - 0.0290383190727 raw_accuracy: 33.57%
score:trade_z period:40 var_type:high_cat	in-sample buys: 2015 sells: 2355 %up: 100.00% mean: 0.00579306805769 std: 0.00198809484331 trade_z: 2.91387912261 raw_accuracy: 99.94%	out-of-sample buys: 4 sells: 42 %up: 34.78% mean: -0.0054199387771 std: 0.00979402467935 trade_z: - 0.553392395318 raw_accuracy: 89.81%
score:defscr period:80 var_type:return	in-sample buys: 1591 sells: 41527 %up: 52.13% mean: 0.000202290361636 std: 0.00343027173033 trade_z: 0.058972109949	out-of-sample buys: 671 sells: 12873 %up: 50.76% mean: 0.000113799042776 std: 0.00423623708859 trade_z: 0.0268632374431
score:defscr period:80 var_type:updown	in-sample buys: 19866 sells: 23253 %up: 57.20% mean: 0.000375409682137 std: 0.00341566092153 trade_z: 0.109908357639 raw_accuracy: 57.20%	out-of-sample buys: 6609 sells: 6938 %up: 49.24% mean: 1.95968768394e- 06 std: 0.00423787700938 trade_z: 0.000462422028672 raw_accuracy: 49.24%
score:defscr period:80 var_type:cat	in-sample buys: 6014 sells: 22602 %up: 57.55% mean: 0.000543320836982 std: 0.00374409277785 trade_z: 0.145114148932 raw_accuracy: 45.41%	out-of-sample buys: 3353 sells: 6947 %up: 48.47% mean: - 0.000125151502016 std: 0.00446921068109 trade_z: - 0.028003043702 raw_accuracy: 33.87%
score:defscr period:80 var_type:high_cat	in-sample buys: 0 sells: 0 %up: 0.00% mean: nan std: nan trade_z: nan raw_accuracy: 89.82%	out-of-sample buys: 0 sells: 0 %up: 0.00% mean: nan std: nan trade_z: nan raw_accuracy: 89.82%
score:trade_z period:80 var_type:return	in-sample buys: 340 sells: 42730 %up: 51.97% mean: 0.000189562040666 std: 0.0034290373917 trade_z: 0.0552814154565	out-of-sample buys: 203 sells: 13334 %up: 50.48% mean: 0.000111482643611 std: 0.00423302544476 trade_z: 0.0263363981781
score:trade_z period:80	in-sample buys: 19866 sells: 23253 %up: 57.20% mean:	out-of-sample buys: 6609 sells: 6938 %up: 49.24% mean: 1.95968768394e-

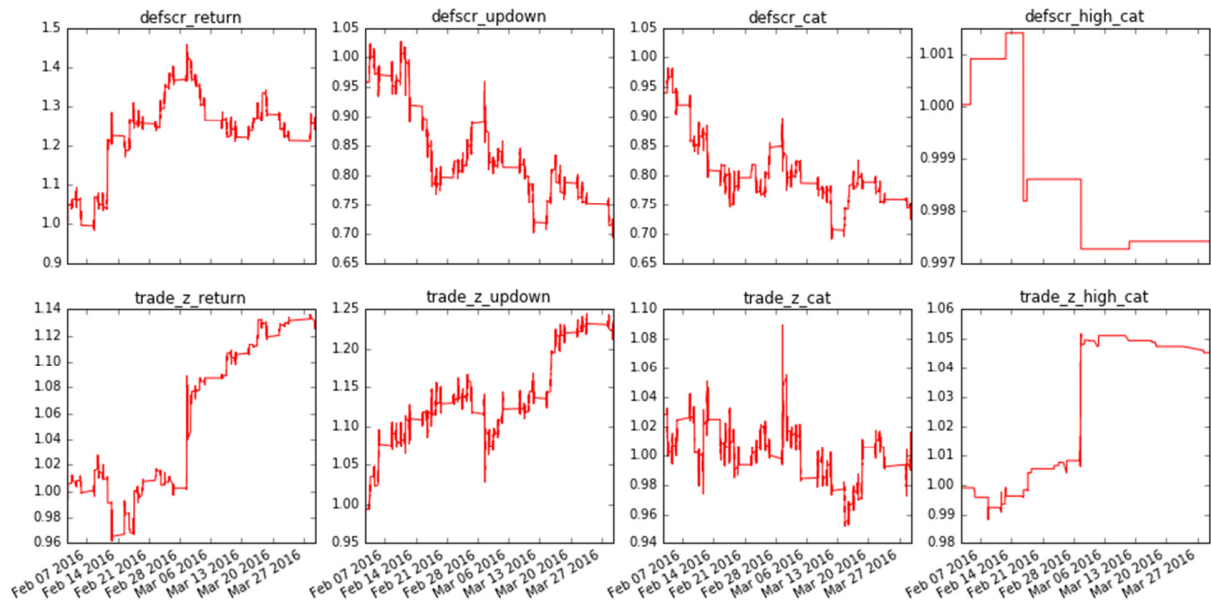
var_type:updown	0.000375409682137 std: 0.00341566092153 trade_z: 0.109908357639 raw_accuracy: 57.20%	06 std: 0.00423787700938 trade_z: 0.000462422028672 raw_accuracy: 49.24%
score:trade_z period:80 var_type:cat	in-sample buys: 1676 sells: 5643 %up: 56.36% mean: 0.000629920894034 std: 0.00438519056356 trade_z: 0.143647324992 raw_accuracy: 36.60%	out-of-sample buys: 657 sells: 1841 %up: 51.40% mean: -3.21058815118e-06 std: 0.00594408414948 trade_z: -0.0005401316789 raw_accuracy: 35.20%
score:trade_z period:80 var_type:high_cat	in-sample buys: 0 sells: 3 %up: 100.00% mean: 0.00625971091405 std: 0.000302156913806 trade_z: 20.7167555268 raw_accuracy: 89.82%	out-of-sample buys: 3 sells: 0 %up: 0.00% mean: -0.0085180946834 std: 0.00144391348868 trade_z: -5.89931096991 raw_accuracy: 89.82%

NAV curves for 5 minute and longer horizons, in-sample (blue) and out-of-sample (red)

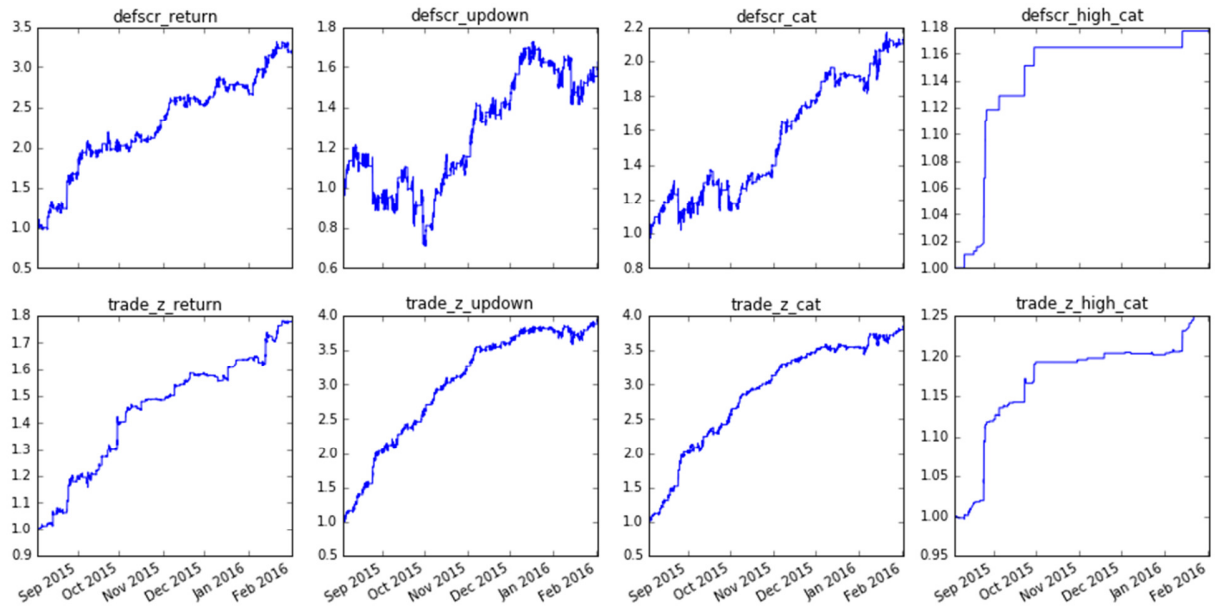
5-minute return predictions NAV



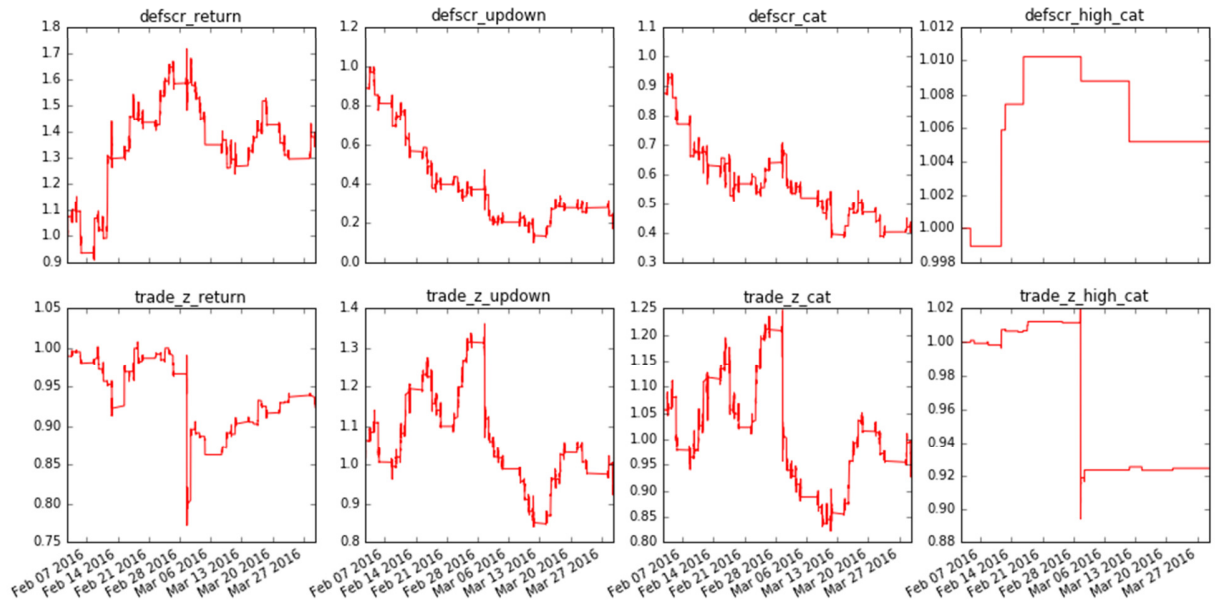
5-minute return predictions NAV



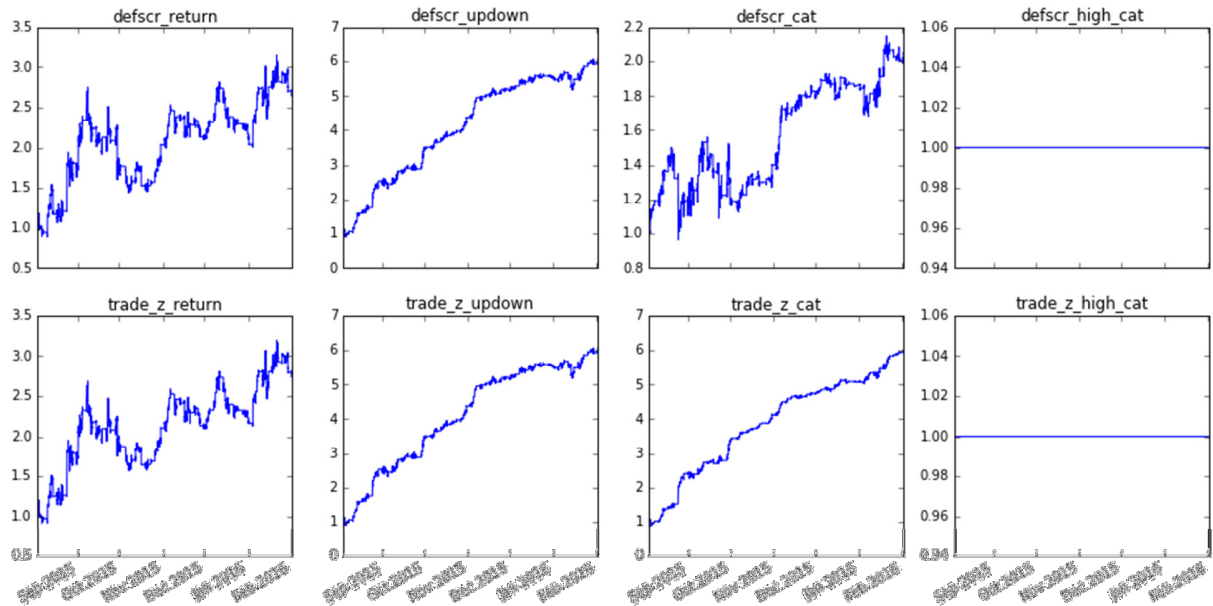
10-minute return predictions NAV



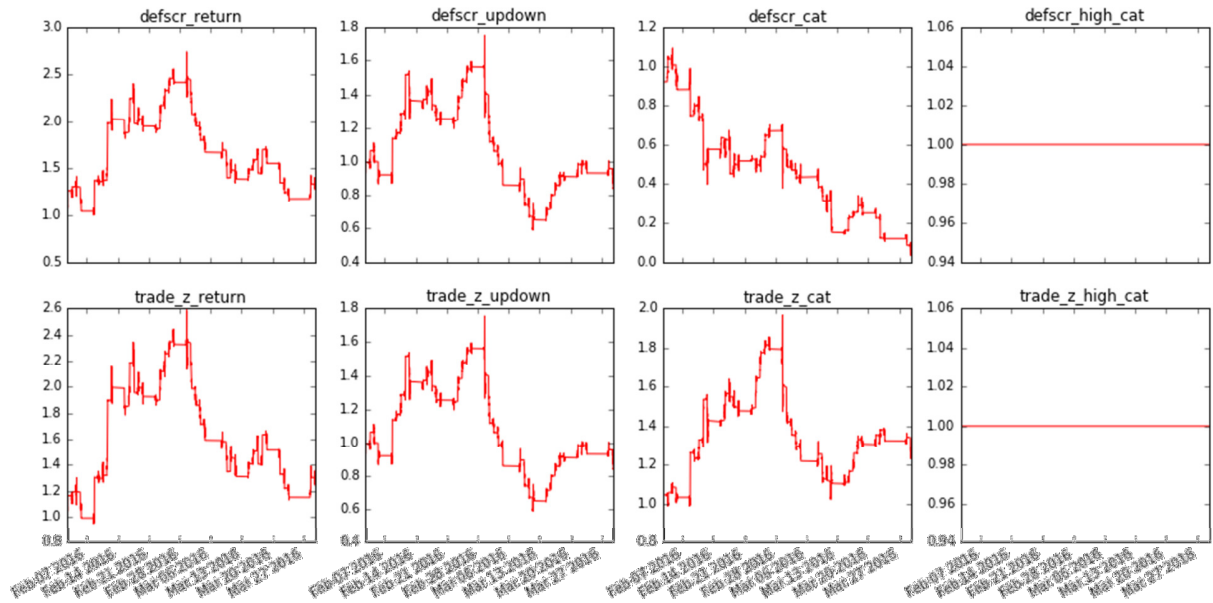
10-minute return predictions NAV



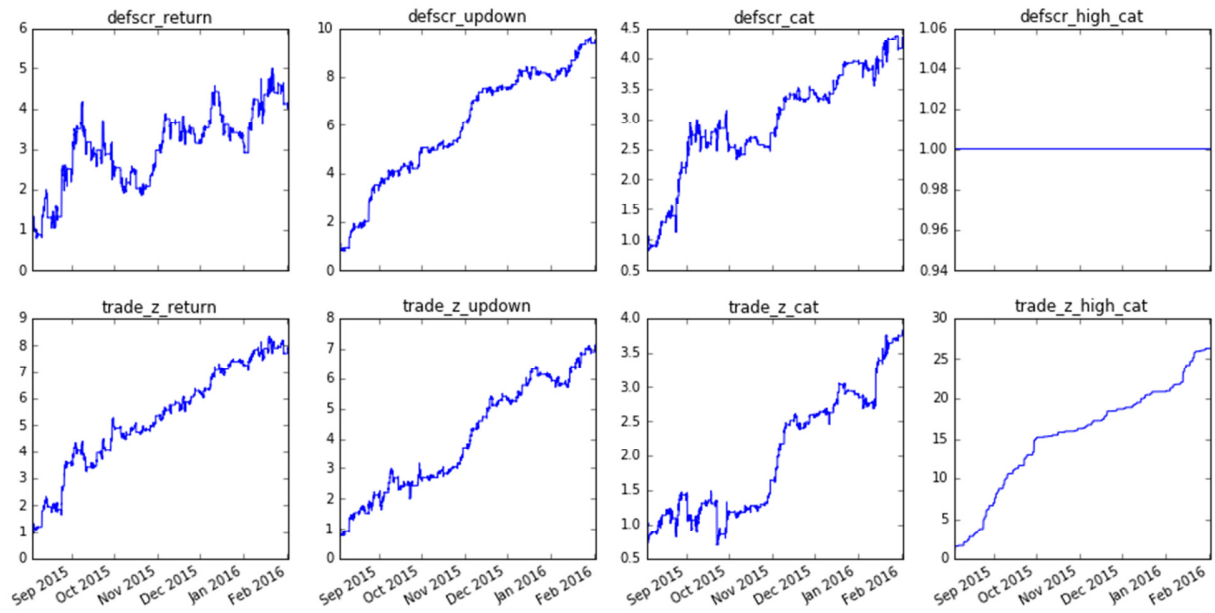
20-minute return predictions NAV



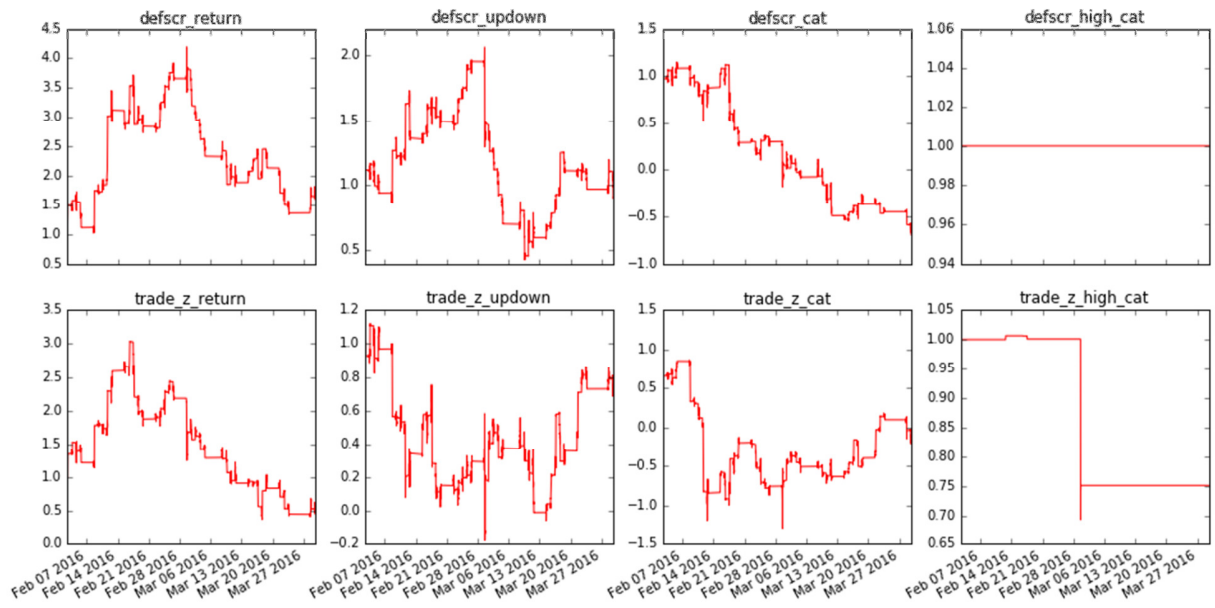
20-minute return predictions NAV



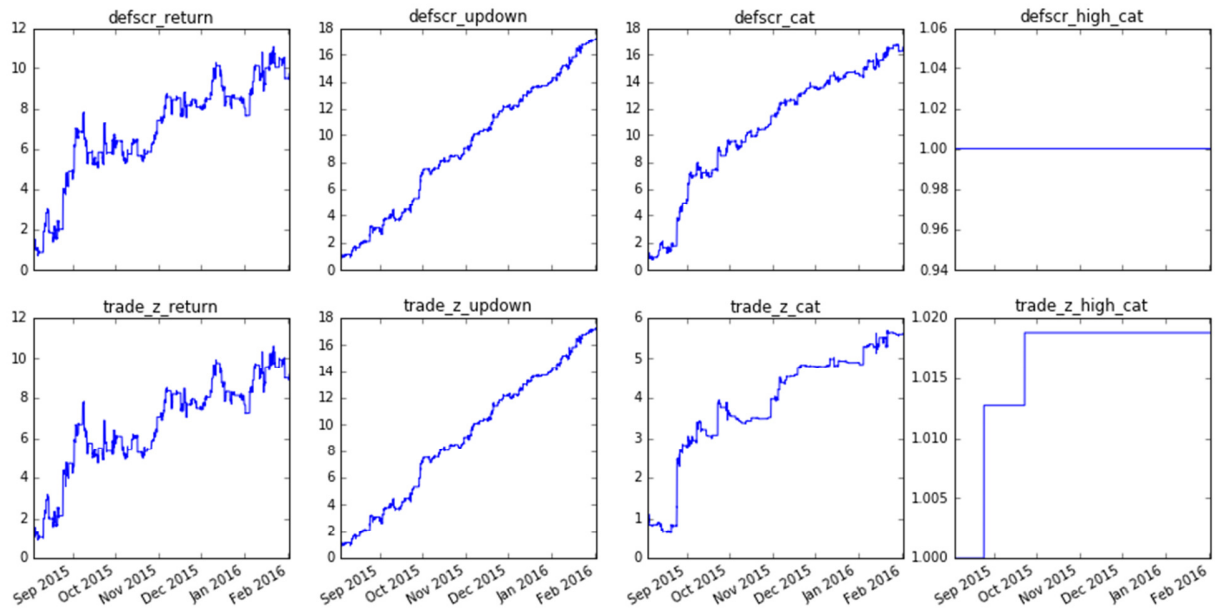
40-minute return predictions NAV



40-minute return predictions NAV



80-minute return predictions NAV



80-minute return predictions NAV

