Distribution of Log Return Values

	Corn	Cotton	Soybeans	Wheat
statistic	value			
str	 f64			
count	6301.0	6451.0	6293.0	6313
null_count	0.0	0.0	0.0	0.0
mean	0.000133	0.000033	0.000117	0.000119
std	0.018004	0.018806	0.015902	0.020373
min	-0.26862	-0.272925	-0.234109	-0.112971
25%	-0.009472	-0.009609	-0.007798	-0.01239
50%	0.0	0.0	0.000606	-0.000533
75%	0.009687	0.009642	0.008586	0.011736
max	0.127571	0.136218	0.203209	0.197014

Target Definition for Classification (Target)

	Corn	Cotton	Soybeans	Wheat
Target	count 			
i64	u32			
1	3065	3258	3238	3302
0	3236	3193	3055	3011

	Corn
target 	proportion
i64	f64
1	0.486431
0	0.513569

So	ybeans
target	proportion
i64	f64
1	0.51454
0	0.48546

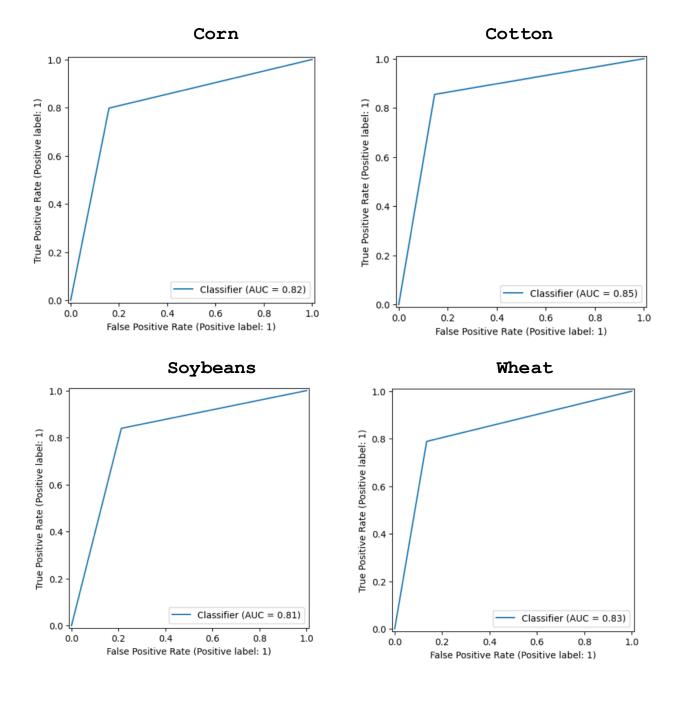
7	Wheat
target	proportion
i64	f64
1	0.476952
0	0.523048

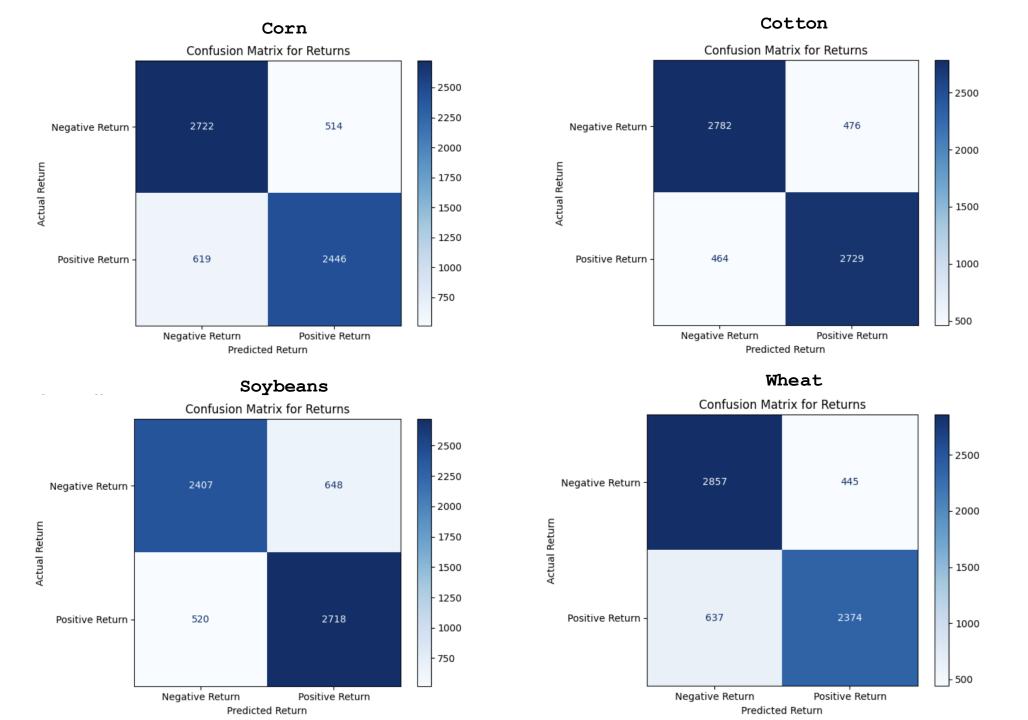
Cotton		
target	proportion	
i64	f64	
1	0.505038	
0	0.494962	

	Corn	
trialNumber	features	aic
 str	 str	f64
1696	4 8 9 10	8724.138958
441	4 9 10	8724.405753
4657	4 8 9 10 11	8725.541811
1576	3 8 9 10	8725.691169
4587	4 6 8 9 10	8725.765199
1711	4 9 10 11	8725.766223
396	3 9 10	8725.825948
1697	4 8 9 11	8726.041787
1660	4 6 9 10	8726.047408
4531	4 5 8 9 10	8726.062405
	Soybeans	
trialNumber	features	aic
str	str	 f64
922	0 9 10 13	8717.41689
923	0 9 10 14	8717.965109
505	6 9 10	8718.340386
106	9 10	8718.85203
2928	0 9 10 11 13	8718.89144
705	0 2 9 10	8719.167831
1930	9 10 12 14	8719.229885
1929	9 10 12 13	8719.254605
28	0 13	8719.278576
2594	0 3 9 10 13	8719.31603

	Cotton	
trialNumber	features	aic
str	str	 f64
369	3 5 9	8940.888858
1512	3 5 9 10	8941.525907
1632	4 5 9 10	8941.650423
56	3 5	8941.957649
10	9	8942.019154
414	4 5 9	8942.05857
1516	3 5 9 14	8942.090105
1449	3 4 5 9	8942.101681
1239	2 3 5 9	8942.114618
106	9 10	8942.136316
	Wheat	
trialNumber	features	aic
str	str	 f64
922	0 9 10 13	8736.505627
923	0 9 10 14	8737.173083
2594	0 3 9 10 13	8737.582429
28	0 13	8737.616861
2889	0 7 9 10 13	8737.636924
1540	3 6 9 10	8737.668231
6256	0 3 4 9 10 13	8737.749358
2429	0 2 9 10 13	8737.749358
2714	0 4 9 10 13	8737.950651
505	6 9 10	8737.98513

Corn Cotton -0.032 -0.031 -0.029 0.014 0.0014 -0.0021 -0.031 -0.038 -0.019 0.0019 -0.0045 -0.0019 - 0.8 - 0.8 0.57 0.57 0.57 **--** -0.032 0.37 0.37 **⊣** - -0.031 0.69 -0.018 0.37 ~ - -0.038 0.62 0.55 0.22 0.57 0.24 0.3 ~ - -0.031 0.69 0.026 0.25 - 0.6 - 0.6 m - -0.019 0.57 0.62 0.62 0.22 m - -0.029 -0.018 <u>0.026</u> -0.0023 -0.0063 0.0033 - 0.4 - 0.4 **4** - 0.0019 0.57 0.55 0.62 **→** - 0.014 0.37 0.24 -0.0023 0.22 0.14 0.1 - 0.2 ო **-**-0.0045 0.13 - 0.2 ഗ - 0.0014 -0.0063 0.88 0.37 0.3 o --0.0019 0.13 0.2 0.22 0.14 o --0.0021 و 0.37 0.25 0.0033 - 0.0 1 2 5 6 Soybeans Wheat -0.04 -0.042 -0.017 -0.031 -0.04 -0.039 -0.032 0.016 0.012 0.012 -0.031 -0.031 - 0.8 - 0.8 -0.04 0.71 0.34 0.34 1 0.99 0.37 0.37 -0.032 ~ - -0.042 0.71 0.35 0.31 0.7 0.69 0.016 -0.022 -0.0019 -0.013 0.011 0.017 - 0.6 - 0.6 m - -0.017 0.34 0.35 0.34 0.34 0.012 0.37 -0.0019 0.37 0.37 - 0.4 - 0.4 **4** - -0.031 0.34 0.31 **4** - 0.012 0.37 -0.013 0.37 0.37 0.89 0.34 0.34 - 0.2 - 0.2 -0.04 0.7 0.34 0.34 ഗ - -0.031 0.011 0.37 0.37 0.34 o - -0.031 0.017 0.37 0.37 0.69 0.34 2 3





Corn	Predicted negative return	predicted total positive return	total totals
actual negative return	2722	514	3236
actual positive return	619	2446	3065
totals	3341	2960	6301
Cotton	Predicted negative return	predicted total positive return	total totals
actual negative return	2782	476	3258
actual positive return	464	2729	3193
totals	3246	3205	6451
Soybeans	Predicted negative return	predicted total positive return	total totals
Soybeans actual negative return		=	
<u> </u>	negative return	positive return	totals
actual negative return	negative return 2407	positive return 648	totals 3055
actual negative return actual positive return	negative return 2407 520	positive return 648 2718	3055 3238
actual negative return actual positive return totals	negative return 2407 520 2927 Predicted	positive return 648 2718 3366 predicted total	totals 3055 3238 6301 total
actual negative return actual positive return totals Wheat	negative return 2407 520 2927 Predicted negative return	positive return 648 2718 3366 predicted total positive return	totals 3055 3238 6301 total totals