

Confusion Matrix: MSA Model

OOS in Year	accuracy	precision	recall	F1-score	specificity
2015	0.65	0.16	0.25	0.19	0.73
2016	0.63	0.16	0.33	0.21	0.68
2017	0.61	0.11	0.33	0.16	0.65
2018	0.67	0.06	0.17	0.09	0.72
2019	0.62	0.07	0.33	0.12	0.65
in-sample	0.68	0.46	0.4	0.43	0.79

Table 4: A confusion matrix showing the values of the MSA-level model with both train/test split, and in-sample data