

Model	Tuning_Parameters	In_Sample_RMSE	Out_of_Sample_RMSE
Lasso	alpha=1, lambda= 10^seq(20,-2, length=300)	465.80	461.84
Ridge	alpha=0, lambda= 10^seq(20,-2, length=300)	447.70	467.12
Linear Models with all variables	Data split 70/30 training-test	405.42	537.61
Linear Models with reduced variables due to Lasso	Data split 70/30 training-test	438.94	504.61
Linear Models- interaction between insignificant variables identified in the model in row 4	Data split 70/30 training-test	407.15	515.39
Polynomial Regression	Data split 70/30 training-test. poly(EMXT,2), poly(DP05,2), poly(UNEMP,3)	419.81	505.72
Splines and Generalized Additive Models	Data split 70/30 training-test. s(EMXT,2), s(DP05,2), s(UNEMP,3)	421.99	507.16
Decision Tree	Data split 70/30 training-test	483.09	541.49
Bagging	Data split 70/30 training-test. MTRY=28, ntree=1000, importance=true	205.28	456.74
Random Forest	Data split 70/30 training-test. mtry=14, imprtance=true, ntree=1000	210.30	437.67
Boosting	Interaction depth=4, shrinkage=0.025, verbose=F, CV folds=10, ntrees=1000	133.96	465.19
Bayesian Additive Regression Trees	Data split 70/30 training-test; variable selection according to Lasso	205.90	423.10
Logistical Regression	Not applicable	Dependent variable not between 0-1	Dependent variable not between 0-1
PCR	Not applicable	Tried but output doesn't look correct	Tried but output doesn't look correct