# DATA 624: Project 2

DATA 624 - Predictive Analytics Group 2

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Project 2: Predicting PH Group 2

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1 Model Performance

File for final submission of Project 2.

## 1 Model Performance

- Set1 = Caret: bagImputed; no additional pre-processing
- Set2 = Caret: bagImputed; PreP method=c('center', 'scale', 'nzv', 'BoxCox')

#### **Train Performance:**

Table 1.1: Train1 Performance

MAPE	RMSE	RSquared	MAE	Method
1.0948	0.5916	0.6757	0.4319	rf
1.1629	0.5500	0.6979	0.3938	cubist
1.2664	0.6985	0.5165	0.5037	svmRadial
1.5170	0.6921	0.5261	0.5153	earth

Table 1.2: Train2 Performance

MAPE	RMSE	RSquared	MAE	Method
0.0081	0.0965	0.6904	0.0688	cubist
0.0088	0.1030	0.6735	0.0751	rf
0.0104	0.1224	0.5042	0.0883	svmRadial
0.0112	0.1265	0.4690	0.0954	earth

#### **Test Accuracy:**

Table 1.3: Test1 Performance

MAPE	RMSE	Rsquared	MAE	Method
0.4930	0.2234	0.9539	0.1578	cubist
0.5351	0.3265	0.9568	0.2466	rf
0.9987	0.6076	0.6385	0.4101	svmRadial
1.6688	0.7260	0.5226	0.5269	earth

Table 1.4: Test2 Performance

MAPE	RMSE	Rsquared	MAE	Method
0.0029	0.0367	0.9586	0.0250	cubist
0.0037	0.0436	0.9596	0.0311	rf
0.0084	0.1064	0.6307	0.0717	svmRadial
0.0107	0.1193	0.5257	0.0908	earth