**PREDICT BUILDING**

**H2O Random Forest – on full data**

**Training Error**

MSE: (Extract with `h2o.mse`) 0.1161989

RMSE: (Extract with `h2o.rmse`) 0.3408796

Logloss: (Extract with `h2o.logloss`) 0.4061398

Mean Per-Class Error: 0.007287031

**Predictions**

Accuracy – 0.9964

Kappa - 0.9943

**Confusion Matrix**

Reference

Prediction 0 1 2

0 535 0 0

1 0 304 0

2 1 3 268

**H2O GBM**

**Training Error**

MSE: (Extract with `h2o.mse`) 0.09265374

RMSE: (Extract with `h2o.rmse`) 0.3043908

Logloss: (Extract with `h2o.logloss`) 0.3538744

Mean Per-Class Error: 0.006850241

**Predictions**

Accuracy – 0.970297

Kappa - 0.953413

**Confusion Matrix**

Reference

Prediction 0 1 2

0 509 0 0

1 27 306 5

2 0 1 263

**PREDICT FLOOR**

BUILDING 0

**H2O Random Forest**

**Training Error**

MSE: (Extract with `h2o.mse`) 0.1560543

RMSE: (Extract with `h2o.rmse`) 0.3950371

Logloss: (Extract with `h2o.logloss`) 0.4953479

Mean Per-Class Error: 0.0363372

**Predictions**

Accuracy – 0.914

Kappa - 0.879

**Confusion matrix**

Reference

Prediction 0 1 2 3

0 76 7 0 0

1 2 192 20 0

2 0 8 138 2

3 0 0 7 83

**H2O GBM**

**Training Error**

MSE: (Extract with `h2o.mse`) 0.1443367

RMSE: (Extract with `h2o.rmse`) 0.3799168

Logloss: (Extract with `h2o.logloss`) 0.4709117

Mean Per-Class Error: 0.02851145

**Predictions**

Accuracy – 0.8673

Kappa - 0.8135

**Confusion matrix**

Reference

Prediction 0 1 2 3

0 70 7 1 0

1 1 183 17 0

2 7 15 134 8

3 0 2 13 77

**PREDICT FLOOR**

BUILDING 1

**H2O Random Forest**

**Training Error**

MSE: (Extract with `h2o.mse`) 0.2050664

RMSE: (Extract with `h2o.rmse`) 0.4528426

Logloss: (Extract with `h2o.logloss`) 0.6032618

Mean Per-Class Error: 0.1178472

**Predictions**

Accuracy - 0.7467

Kappa - 0.6358

**Confusion matrix**

Reference

Prediction 0 1 2 3

0 21 13 0 0

1 5 89 1 0

2 4 40 83 11

3 0 1 2 34

**H20 GBM**

**Training Error**

MSE: (Extract with `h2o.mse`) 0.166547

RMSE: (Extract with `h2o.rmse`) 0.4081017

Logloss: (Extract with `h2o.logloss`) 0.519289

Mean Per-Class Error: 0.06861942

**Predictions**

Accuracy – 0.7072

Kappa - 0.5814

**Confusion matrix**

Reference

Prediction 0 1 2 3

0 15 9 0 0

1 2 84 0 0

2 13 49 78 7

3 0 1 8 38

**PREDICT FLOOR**

BUILDING 2

**H2O Random Forest**

**Training Error**

MSE: (Extract with `h2o.mse`) 0.09303981

RMSE: (Extract with `h2o.rmse`) 0.3050243

Logloss: (Extract with `h2o.logloss`) 0.3457301

Mean Per-Class Error: 0.02789039

**Predictions**

Accuracy – 0.7868

Kappa - 0.7092

**Confusion matrix**

Reference

Prediction 0 1 2 3 4

0 21 4 0 0 0

1 3 104 13 0 0

2 0 1 31 0 0

3 0 3 11 42 23

4 0 0 0 0 16

**H20 GBM**

**Training Error**

MSE: (Extract with `h2o.mse`) 0.1213685

RMSE: (Extract with `h2o.rmse`) 0.3483798

Logloss: (Extract with `h2o.logloss`) 0.4189414

Mean Per-Class Error: 0.02177209

**Predictions**

Accuracy – 0.8309

Kappa - 0.7679

**Confusion matrix**

Reference

Prediction 0 1 2 3 4

0 21 7 1 0 1

1 3 104 6 2 8

2 0 1 47 1 0

3 0 0 1 38 14

4 0 0 0 1 16

**PREDICT LONGITUDE**

BUILDING 0

**H2O Random Forest**

**Training Error**

MSE: 72.04798

RMSE: 8.488108

MAE: 6.400951

RMSLE: NaN

Mean Residual Deviance : 72.04798

**Predictions**

RMSE Rsquared MAE

11.1437719 0.8295829 8.3527581

**H2O GBM**

**Training Error**

MSE: 142.1566

RMSE: 11.92294

MAE: 8.976946

RMSLE: NaN

Mean Residual Deviance : 142.1566

**Predictions**

RMSE Rsquared MAE

14.8373892 0.8541725 11.2754089

**PREDICT LONGITUDE**

BUILDING 1

**H2O Random Forest**

**Training Error**

MSE: 547.8948

RMSE: 23.40715

MAE: 20.37796

RMSLE: NaN

Mean Residual Deviance : 547.8948

**Predictions**

RMSE Rsquared MAE

17.6423694 0.8654135 13.8873414

**H2O GBM**

**Training Error**

MSE: 142.1566

RMSE: 11.92294

MAE: 8.976946

RMSLE: NaN

Mean Residual Deviance : 142.1566

**Predictions**

RMSE Rsquared MAE

25.0531938 0.8611451 21.4898421

**PREDICT LONGITUDE**

BUILDING 2

**H2O Random Forest**

**Training Error**

MSE: 230.8998

RMSE: 15.19539

MAE: 11.2981

RMSLE: NaN

Mean Residual Deviance : 230.8998

**Predictions**

RMSE Rsquared MAE

23.9917382 0.5544172 16.1967696

**H2O GBM**

**Training Error**

MSE: 294.6446

RMSE: 17.16522

MAE: 14.0962

RMSLE: NaN

Mean Residual Deviance : 294.6446

**Predictions**

RMSE Rsquared MAE

25.8712090 0.6023656 19.2859512

**PREDICT LATITUDE**

BUILDING 0

**H2O Random Forest**

**Training Error**

MSE: 731.1104

RMSE: 27.03905

MAE: 23.35292

RMSLE: 5.557921e-06

Mean Residual Deviance : 731.1104

**Predictions**

RMSE Rsquared MAE

26.8264175 0.7166236 23.2987778

**H2O GBM**

**Training Error**

MSE: 601.1733

RMSE: 24.51884

MAE: 23.53067

RMSLE: 5.039883e-06

Mean Residual Deviance : 601.1733

**Predictions**

RMSE Rsquared MAE

15.5253058 0.7778636 10.5900397

**PREDICT LATITUDE**

BUILDING 1

**H2O Random Forest – was error message with mtry=288 and changed to 144**

**Training Error**

MSE: 784.4915

RMSE: 28.00878

MAE: 22.02044

RMSLE: 5.757327e-06

Mean Residual Deviance : 784.4915

**Predictions**

RMSE Rsquared MAE

30.4018510 0.7277937 24.7369683

**H2O GBM**

**Training Error**

MSE: 372.0001

RMSE: 19.2873

MAE: 16.51848

RMSLE: 3.964594e-06

Mean Residual Deviance : 372.0001

**Predictions**

RMSE Rsquared MAE

20.1155869 0.8167576 16.6948313

**PREDICT LATITUDE**

BUILDING 2

**H2O Random Forest**

**Training Error**

MSE: 497.6427

RMSE: 22.30791

MAE: 18.28803

RMSLE: 4.585566e-06

Mean Residual Deviance : 497.6427

**Predictions**

RMSE Rsquared MAE

28.7722775 0.1639357 22.0612560

**H2O GBM**

**Training Error**

MSE: 565.7366

RMSE: 23.78522

MAE: 20.14949

RMSLE: 4.889238e-06

Mean Residual Deviance : 565.7366

**Predictions**

RMSE Rsquared MAE

22.0241112 0.5169086 14.2581132