

frame 67-33

?

Assistance

<i>Routine</i>	<i>Description</i>
↳ importFiles	Import file(s) into H ₂ O
↳ importSqlTable	Import SQL table into H ₂ O
↳ getFrames	Get a list of frames in H ₂ O
✖ splitFrame	Split a frame into two or more frames
🔗 mergeFrames	Merge two frames into one
📦 getModels	Get a list of models in H ₂ O
_Grids getGrids	Get a list of grid search results in H ₂ O
⚡ getPredictions	Get a list of predictions in H ₂ O
☰ getJobs	Get a list of jobs running in H ₂ O
⁺ runAutoML	Automatically train and tune many models
📦 buildModel	Build a model
📦 importModel	Import a saved model
⚡ predict	Make a prediction

↳ Import Files

Search: C:\Users\prans_2efeuwx\Desktop\Ripik.AI\145TPD\145_TPD_flat.csv



Search Results: (All files added)

Selected Files: 1 file selected: Clear All

× C:\Users\prans_2efeuwx\Desktop\Ripik.AI\145TPD\145_TPD_flat.csv

Actions:



Cloud icon 1 / 1 files imported.

Files 🔑 C:\Users\prans_2efeuwx\Desktop\Ripik.AI\145TPD\145_TPD_flat.csv

Actions ⚙️ Parse these files...

⚙️ Setup Parse

PARSE CONFIGURATION

Sources nfs:\C:\Users\prans_2efeuwx\Desktop\Ripik.AI\145TPD\145_TPD_flat.csv

ID X145_TPD_flat1.hex

Parser CSV

Separator ,: '044'

Escape Character 0

Column Headers Auto

First row contains column names

First row contains data

Options Enable single quotes as a field quotation character

Delete on done

EDIT COLUMN NAMES AND TYPES

Search by column name...

1	DateTime	Enum	11:57.4	26:57.4	41:57.4	56:57.4	11:57.4
2	Melter Gas	Numeric	46.56670761	44.75955963	46.75978088	5	46.1
3	Header Gas	Numeric	1.907552123	1.911675334	1.903862834	1.923611164	1.91
4	ThermoCoup	Numeric	131.9000092	425.1000061	290.8999939	113.4000015	451
5	ThermoCoup	Numeric	115.5	552.7999878	262.1000061	105.2000046	562
6	ThermoCoup	Numeric	470.1000061	237	310	485	199
7	ThermoCoup	Numeric	497.2000122	212.8000031	342.5	508.3000183	174
8	Glass leve	Numeric	0.132523537	0.032407761	0.04745388	-0.015625	0.0!
9	Fibber Opt	Numeric	1330.30957	1330.410889	1329.947876	1329.658569	1329
10	Fibber Opt	Numeric	1372.612793	1372.569458	1372.453735	1372.309082	1372
11	High Pressi	Numeric	41.11979294	41.25000381	41.01562881	40.91146088	40.9
12	High Pressi	Numeric	39.98263931	40.24088669	40.04557419	40.04774475	39.
13	ThermoCoup	Numeric	1344.5	1307.700073	1320.900024	1340.099976	1301
14	ThermoCoup	Numeric	1262	1261.800049	1261.599976	1261.900024	1261
15	Melter Gas	Numeric	815	815	815	815	815

Previous page

Next page

Parse

Job

Run Time 00:00:00.435

Remaining Time 00:00:00.0

Type Frame
 Key X145_TPD_flat1.hex
 Description Parse
 Status DONE
 Progress 100%

Done.

Actions [View](#)

X145_TPD_flat1.hex

Actions: [View Data](#) [Split](#) [Build Model](#) [Run AutoML](#) [Predict](#) [Delete](#)
 [Download](#) [Export](#)

Rows	Columns	Compressed Size
454	30	135KB

▼ COLUMN SUMMARIES

label	type	Missing	Zeros	+Inf	-Inf	min	max	mean
DateTime	enum	0	4	0	0	0	62.0	.
Melter Gas Flow Valve Opening _DB885,DD670,QC	real	0	0	0	0	5.0	50.5068	45.0835
Header Gas Pressure - Gail_DB1367,DD0,QC	real	0	0	0	1.8550	1.9731	1.9095	
Thermocouple Flue Pass left Inner _DB872,DD0,QC	real	0	0	0	109.9000	476.6000	295.9535	120.0
Thermocouple Flue Pass left outer _DB874,DD0,QC	real	0	0	0	105.2000	581.0	350.2531	180.0
Thermocouple Flue Pass Right Inner _DB876,DD0,QC	real	0	0	0	143.8000	485.0	319.9220	110.0
Thermocouple Flue Pass Right outer _DB879,DD0,QC	real	0	0	0	132.8000	510.8000	335.6749	110.0
Glass level_DB1177,DD0,QC	real	0	17	0	0	-0.8513	0.9462	0.0224
Fibber Optic Thermometer -								

 [Previous 20 Columns](#) [Next 20 Columns](#)

▶ CHUNK COMPRESSION SUMMARY

▶ FRAME DISTRIBUTION SUMMARY

✖ Split Frame

Frame: X145_TPD_flat1.hex

Splits: Ratio

0.67

Key

X145_TPD_flat1.hex_0.670

✖

0.330

X145_TPD_flat1.hex_0.330

Add a new split

Seed: 815380

✖ Create

▪ Split Frames

Type	Key	Ratio
▪	X145_TPD_flat1.hex_0.670	0.67
▪	X145_TPD_flat1.hex_0.330	0.32999999999999996

▪ Run AutoML

PARAMETERS

training_frame* X145_TPD_flat1.hex_0.670

response_column* Melter Gas flow_DB885,DD134,QC

validation_frame (Choose...)

blending_frame

leaderboard_frame

project_name

distribution 

A D V A N C E D

fold_column

weights_column

ignored_columns

Showing page 3 of 3. -27 ignored.

<input type="checkbox"/> chem_comp_Fe2O3	REAL
<input type="checkbox"/> chem_comp_CaO	REAL
<input type="checkbox"/> chem_comp_MgO	REAL
<input type="checkbox"/> chem_comp_Na2O	REAL
<input type="checkbox"/> chem_comp_K2O	REAL
<input type="checkbox"/> chem_comp_SO3	REAL
<input type="checkbox"/> physical_test_density_gm_cc	REAL
<input type="checkbox"/> physical_test_seed_count_result	INT 0% NA
<input checked="" type="checkbox"/> C29	INT 100% NA
<input checked="" type="checkbox"/> Melter Gas flow_DB885,DD134,QC	REAL

All None

Only show columns with more than 0 % missing values.

sort_metric

nfold

balance_classes

exclude_algos Search...

- GLM
- DRF
- GBM
- DeepLearning
- StackedEnsemble
- XGBoost

All None

exploitation_ratio -1

monotone_constraints

seed -1

max_models 0

max_runtime_secs 0

max_runtime_secs_per_model 0

stopping_rounds 3

stopping_metric 

stopping_tolerance -1

EXPERT

keep_cross_validation_predictions 

keep_cross_validation_models

keep_cross_validation_fold_assignment

export_checkpoints_dir _____

 Build Models

☰ Job

Run Time 00:59:29.897

Remaining Time 00:00:00.0

Type AutoML

Key  AutoML_2_20220526_234101@@Melter_Gas_flow_DB885_DD134_QC

Description AutoML build

Status DONE

Progress 100%

Done.

Actions  View

⚡ Predict

Name:

Model: 

Frame:

Actions:  Predict

⚡ Prediction

Actions: Inspect

▼ PREDICTION

```

model DRF_1_AutoML_2_20220526_234101
model_checksum 2317110431156014992
frame X145_TPD_flat1.hex_0.330
frame_checksum -5025220239311643726
description .
model_category Regression
scoring_time 1653593184267
predictions prediction-6aa62a87-6cb0-46c1-8f5d-d18f788ea7c5
MSE 5452.813706
RMSE 73.843170
nobs 145
custom_metric_name .
custom_metric_value 0
r2 0.715939
mean_residual_deviance 5452.813706
mae 22.962355
rmsle 0.221266

```

Combine predictions with frame

Model

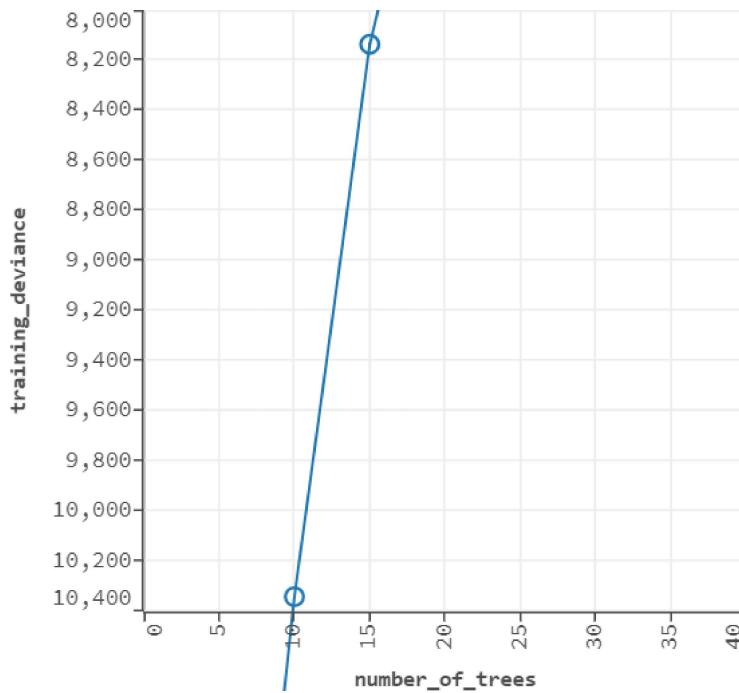
Model ID: DRF_1_AutoML_2_20220526_234101

Algorithm: Distributed Random Forest

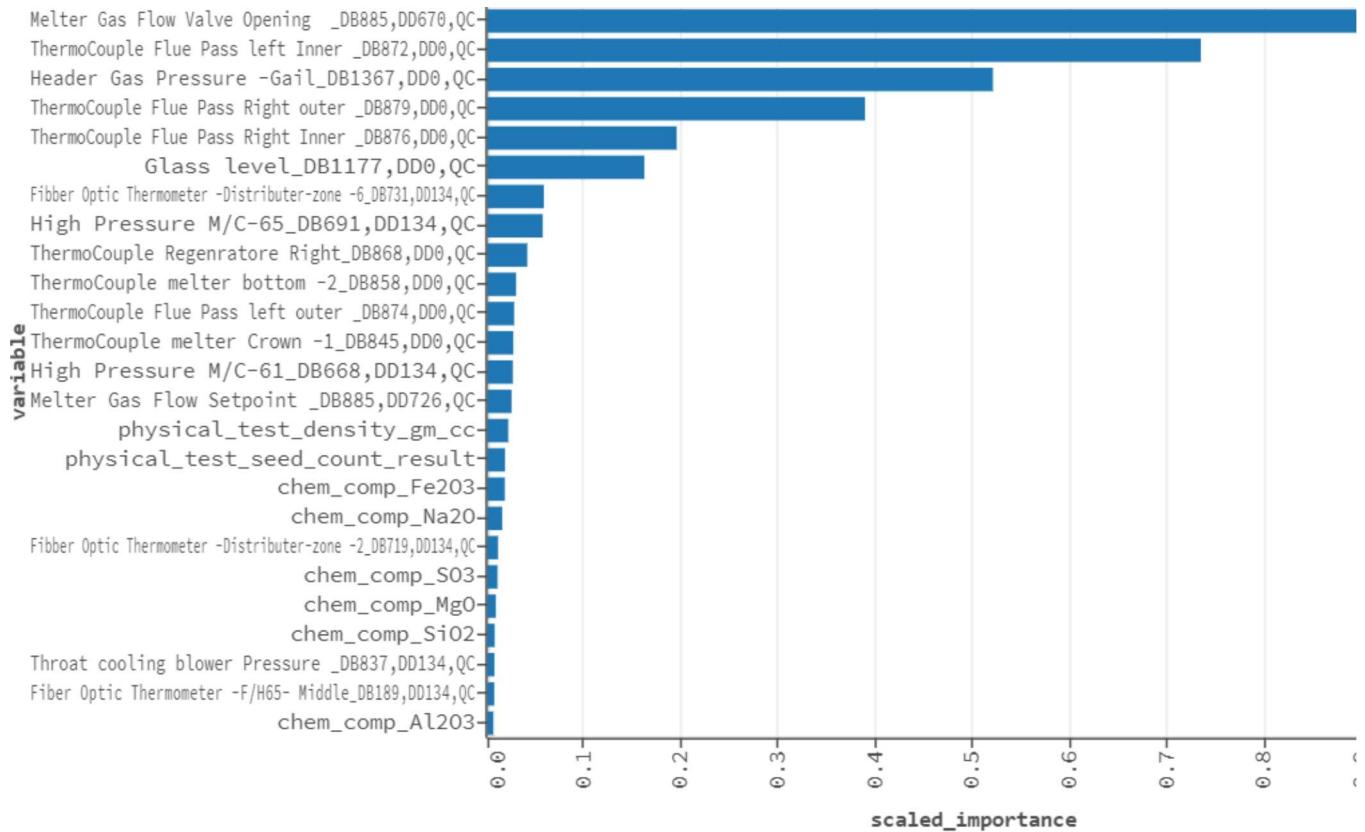
Actions: Refresh Predict... Download POJO
 Download Model Deployment Package (MOJO) Export Inspect Delete
 Download Gen Model

► MODEL PARAMETERS

▼ SCORING HISTORY - DEVIANCE



▼ VARIABLE IMPORTANCES



► OUTPUT

► COLUMN_TYPES

► CROSS_VALIDATION_MODELS

► CROSS_VALIDATION_PREDICTIONS

► OUTPUT - MODEL SUMMARY

► OUTPUT - SCORING HISTORY

► CV_SCORING_HISTORY

► OUTPUT - TRAINING_METRICS

► OUTPUT - CROSS_VALIDATION_METRICS

► OUTPUT - CROSS-VALIDATION METRICS SUMMARY

► OUTPUT - VARIABLE IMPORTANCES

▼ PREVIEW POJO

 Preview POJO

⌚ Partial Dependence

Save
Destination

PDP as:

Model:

Frame:

row_index

Row for which partial dependence will be calculated in input frame (-1 for all).

nbins

How many levels should PDP compute. More levels w

Select
columns?

Checking this will allow you to select custom columns default, the top 10 features are used. Those features a variable importance.

Available Search...

columns: Showing page 1 of 1. 17 selected for PDP calculations.

<input checked="" type="checkbox"/> Throat cooling blower Pressure _DB837,DD134,QC	REAL
<input type="checkbox"/> chem_comp_SiO2	REAL
<input type="checkbox"/> chem_comp_Al2O3	REAL
<input type="checkbox"/> chem_comp_Fe2O3	REAL
<input type="checkbox"/> chem_comp_CaO	REAL
<input type="checkbox"/> chem_comp_MgO	REAL
<input type="checkbox"/> chem_comp_Na2O	REAL
<input type="checkbox"/> chem_comp_K2O	REAL
<input type="checkbox"/> chem_comp_SO3	REAL
<input type="checkbox"/> physical_test_density_gm_cc	REAL

All

None

← Previous 10

2D PDP

+ Add

Select lists of column name pairs to plot 2D partial dep

Columns:

Actions:

⟳ Compute

☰ Job

Run Time 00:00:00.732

Remaining Time 00:00:00.0

Type PartialDependence

Key Q pdp-22914cfa-ede6-4a8c-9e89-08d591fdc6c2

Description PartialDependence

Status DONE

Progress 100%

Done.

Actions

🔍 View

cs

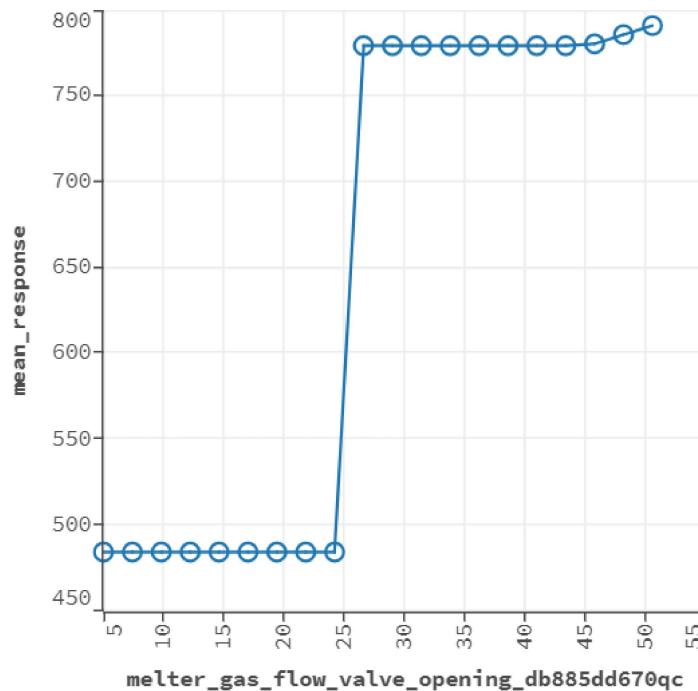
▣ Partial Dependence Summary

Model ID: DRF_1_AutoML_2_20220526_234101

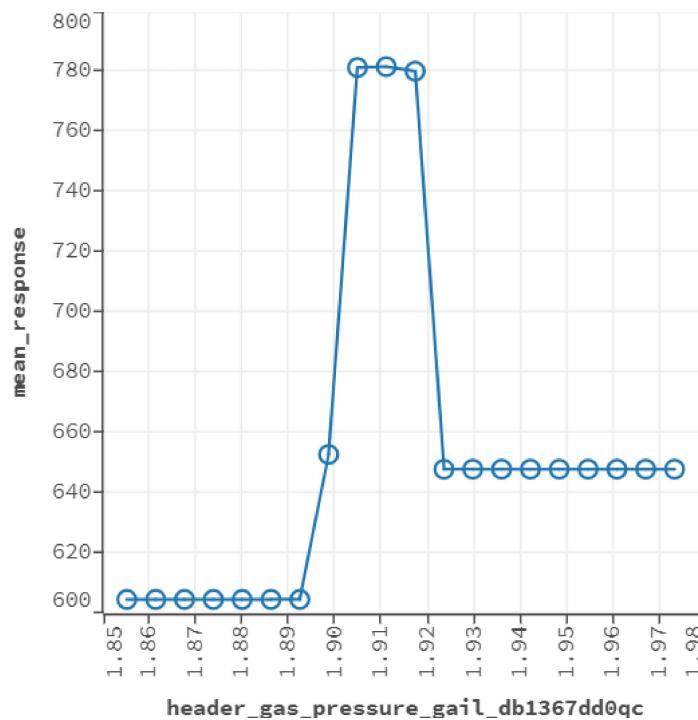
Frame ID: X145_TPD_flat1.hex_0.670

Show PDP Data Table?

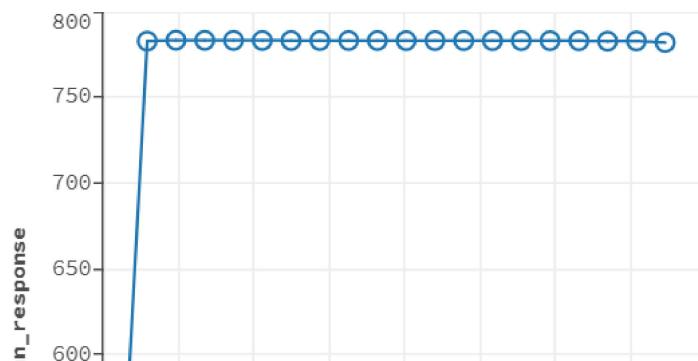
▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'MELTER GAS FLOW VALVE OPENING _DB885,DD670,QC'.

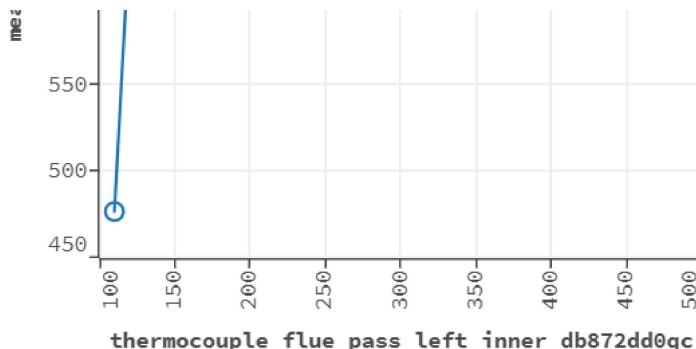


▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'HEADER GAS PRESSURE -GAIL_DB1367, DD0, QC'.

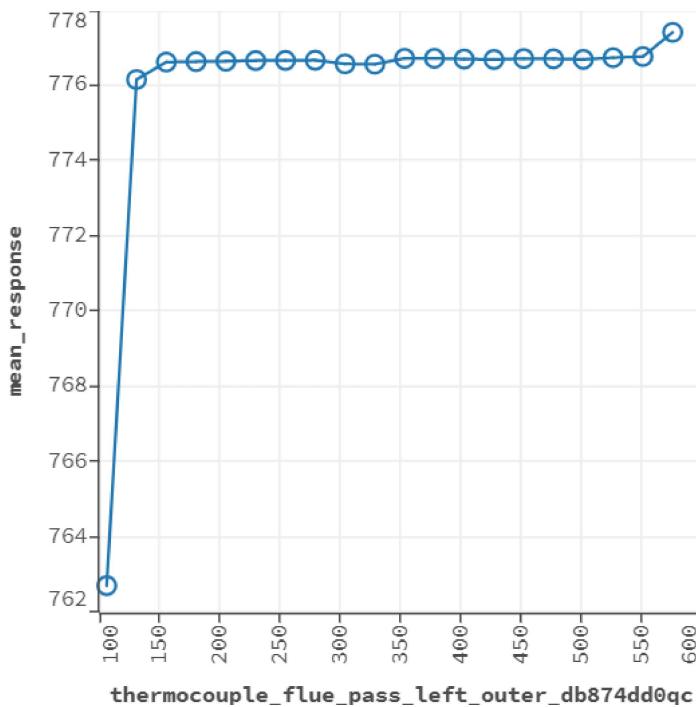


▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'THERMOCOUPLE FLUE PASS LEFT INNER _DB872, DD0, QC'.

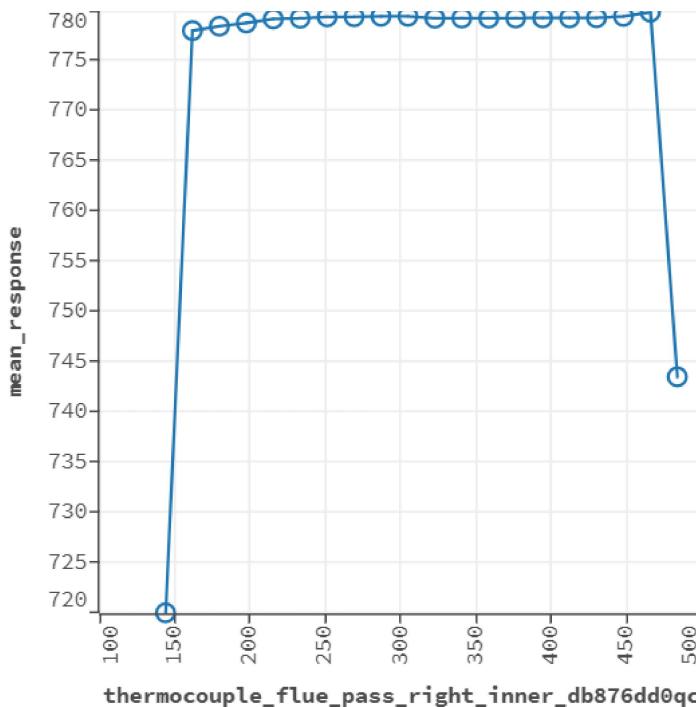




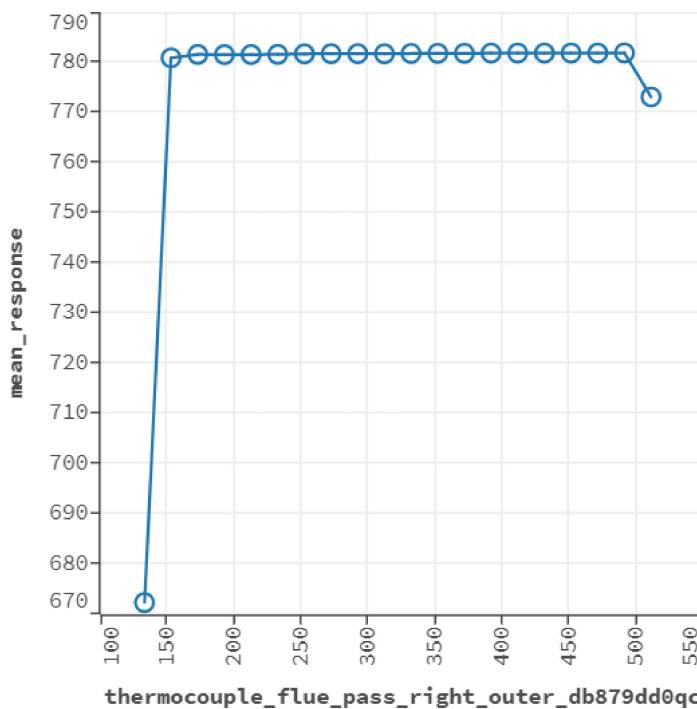
▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'THERMOCOUPLE FLUE PASS LEFT OUTER _DB874, DDO, QC'.



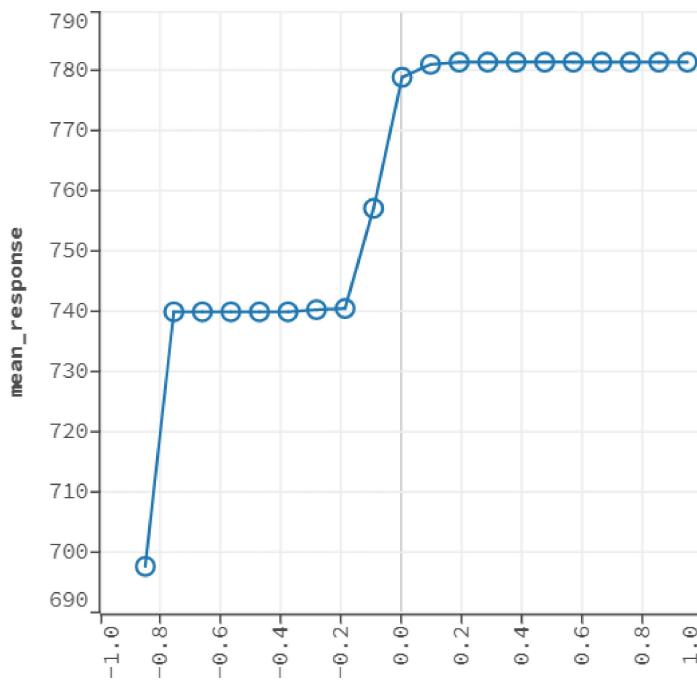
▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'THERMOCOUPLE FLUE PASS RIGHT INNER _DB876, DDO, QC'.



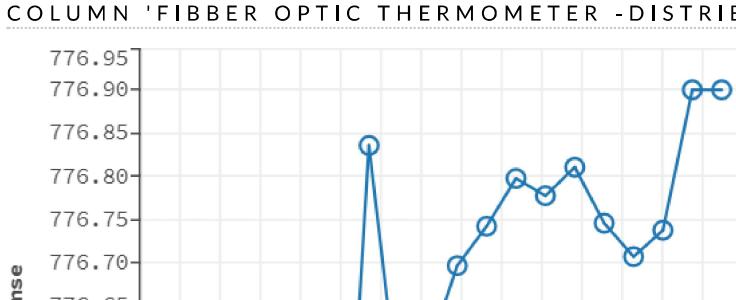
▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'THERMOCOUPLE FLUE PASS RIGHT OUTER _DB879, DD0, QC'.

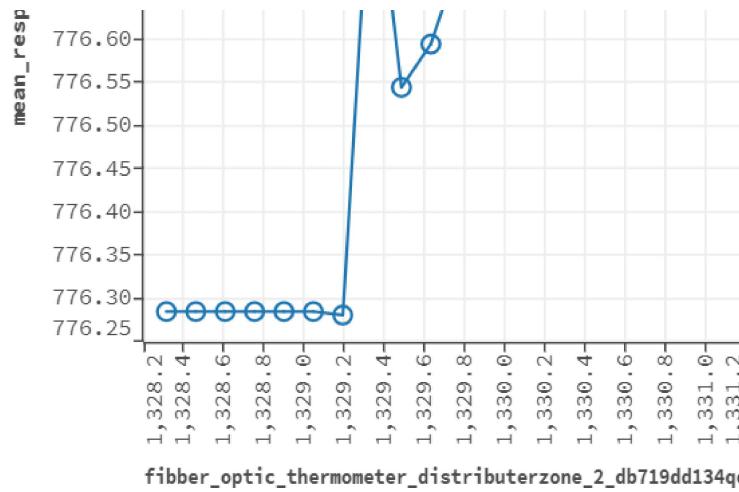


▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'GLASS LEVEL_DB1177, DD0, QC'.

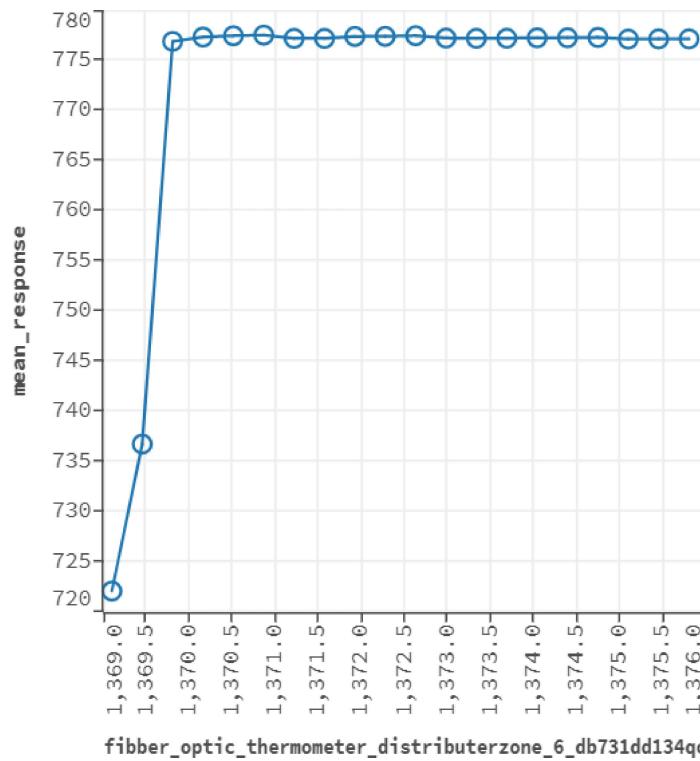


▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'FIBBER OPTIC THERMOMETER -DISTRIBUTER-ZONE -2_DB719, DD134, QC'.

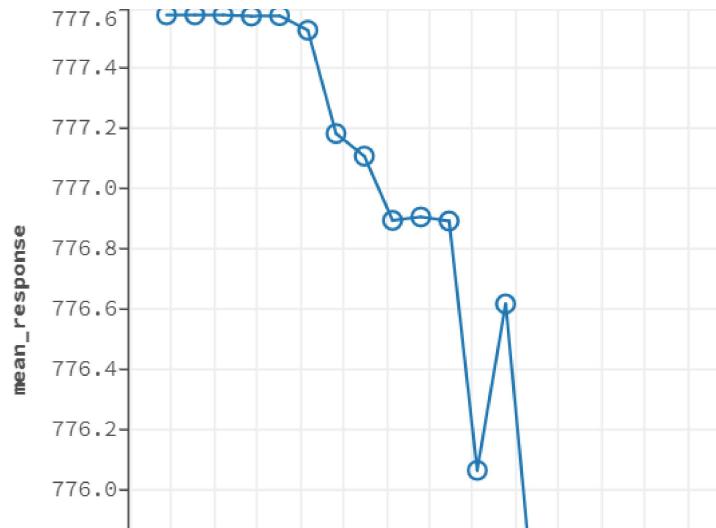


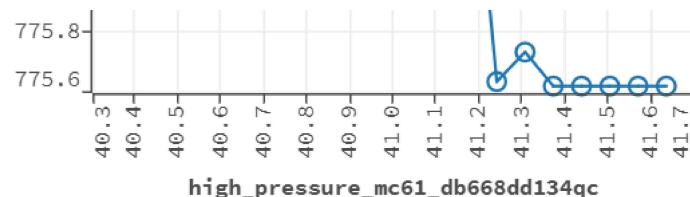


▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'FIBBER OPTIC THERMOMETER -DISTRIBUTER-ZONE -6_DB731,DD134,QC'.

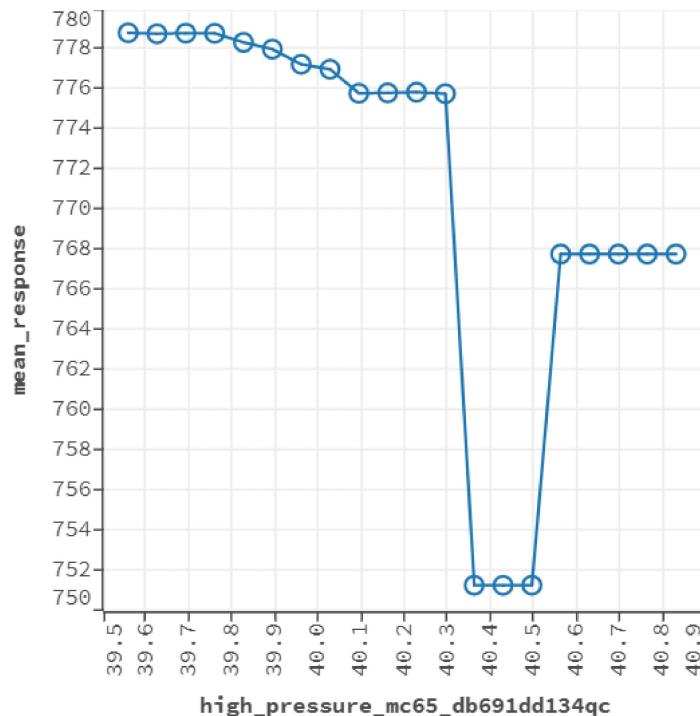


▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'HIGH PRESSURE M/C-61_DB668,DD134,QC'.

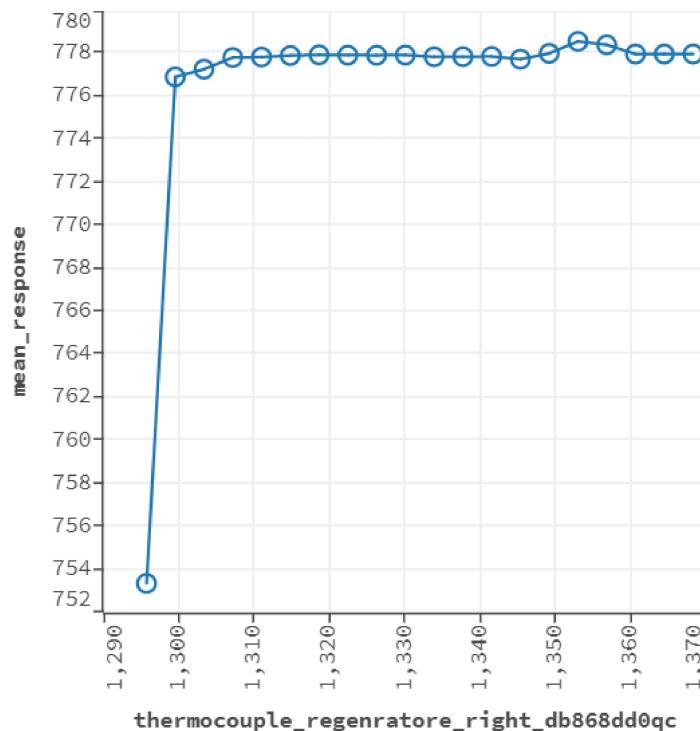




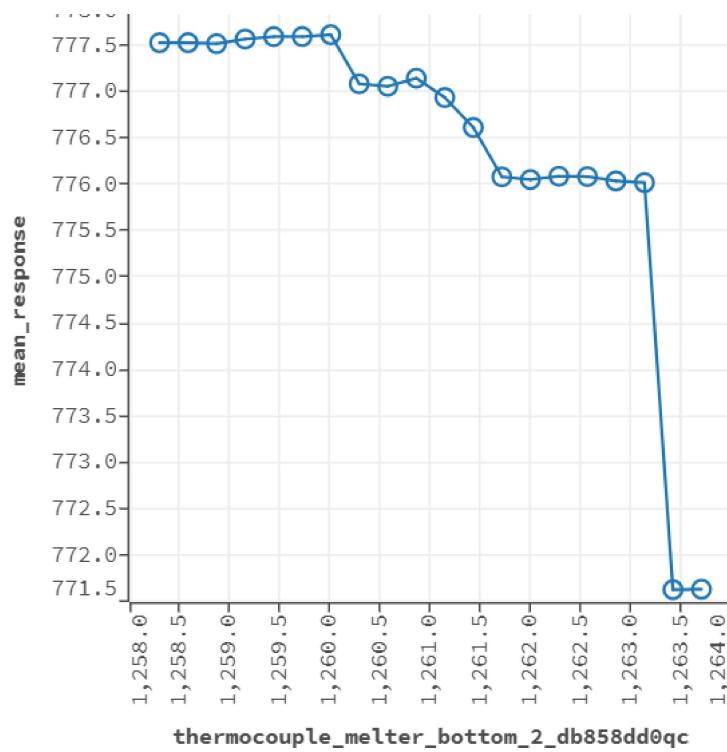
▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'HIGH PRESSURE M/C-65_DB691, DD134, QC'.



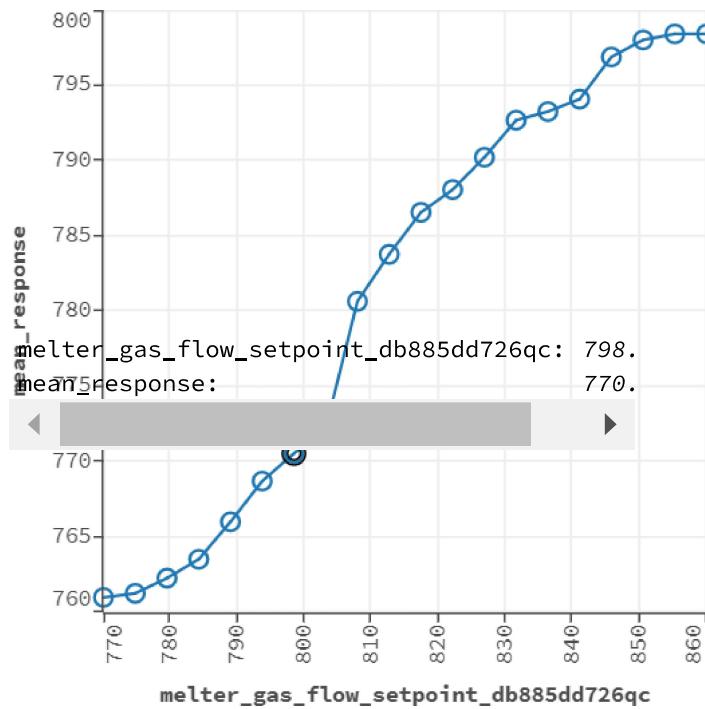
▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'THERMOCOUPLE REGENRATORE RIGHT_DB868, DD0, QC'.



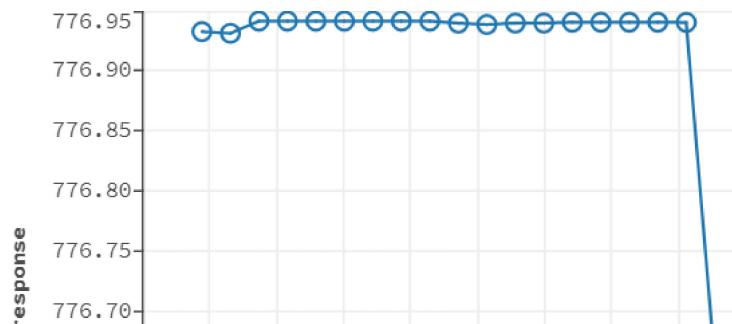
▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'THERMOCOUPLE MELTER BOTTOM -2_DB858, DD0, QC'.

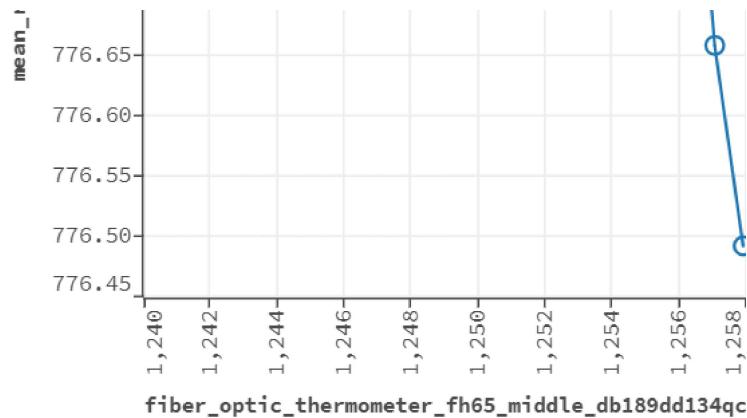


▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'MELTER GAS FLOW SETPOINT _DB885_DD726,QC'.

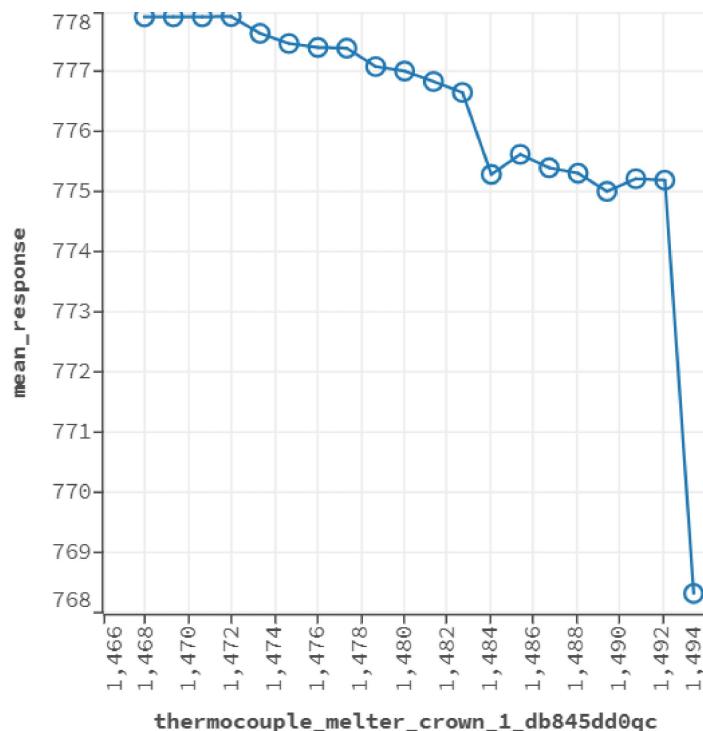


▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'FIBER OPTIC THERMOMETER -F/H65_MIDDLE_DB189_DD134,QC'.

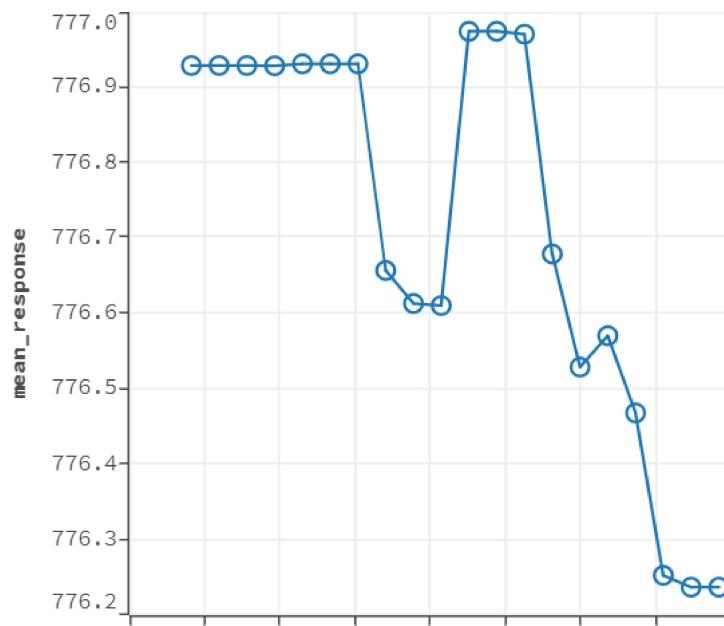




▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'THERMOCOUPLE MELTER CROWN -1_DB845, DDO,QC'.



▼ PARTIAL DEPENDENCE PLOT OF MODEL DRF_1_AUTOML_2_20220526_234101 ON COLUMN 'THROAT COOLING BLOWER PRESSURE _DB837,DD134,QC'.



245 246 247 248 249
250 251 252 253

throat_cooling_blower_pressure_db837dd134qc

