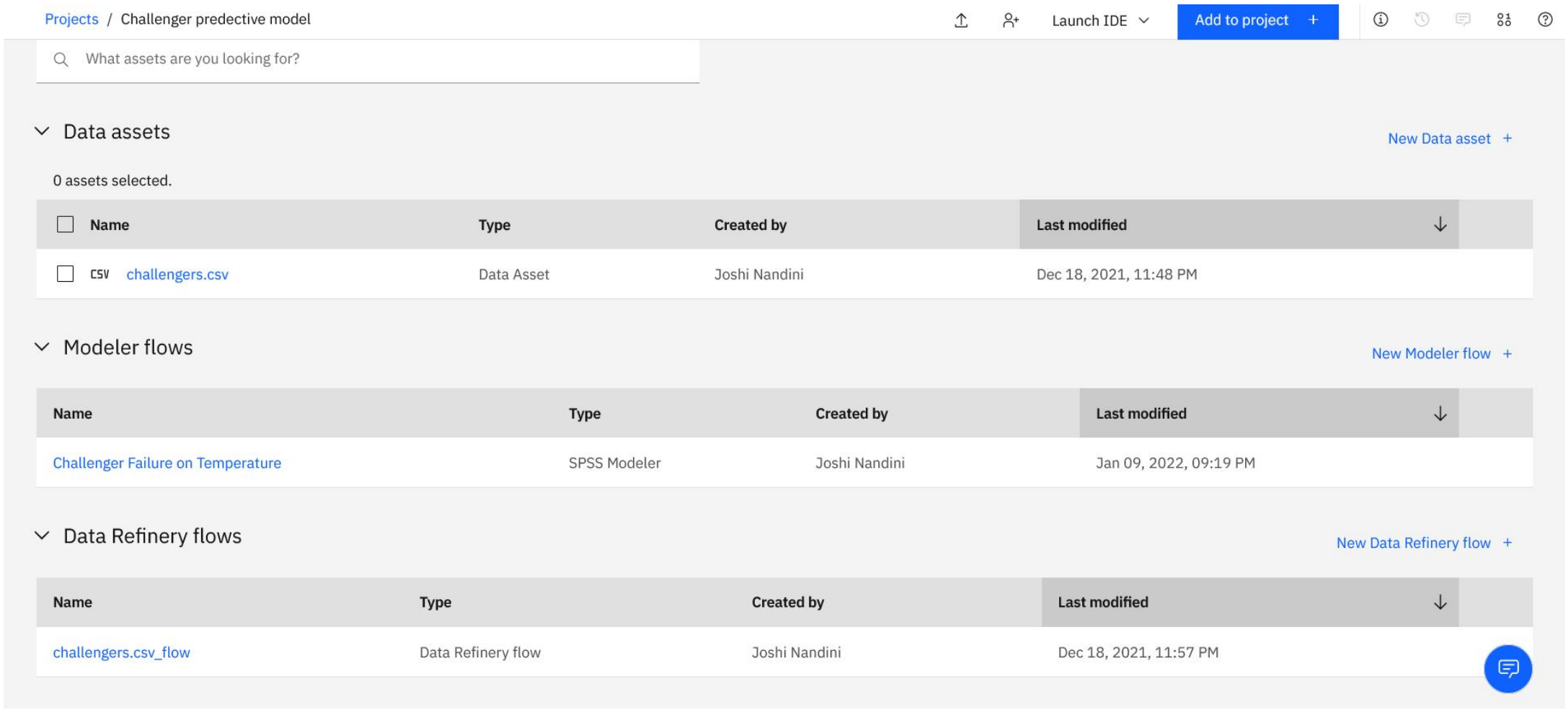

Projects / Challenger predective model
Launch IDE
Add to project +
What assets are you looking for?
Data assets
New Data asset +
0 assets selected.
Name
Type
Created by
Last modified
CSV challengers.csv
Data Asset
Joshi Nandini
Dec 18, 2021, 11:48 PM
Modeler flows
New Modeler flow +
Name
Type
Created by
Last modified
Challenger Failure on Temperature
SPSS Modeler
Joshi Nandini
Jan 09, 2022, 09:19 PM
Data Refinery flows
New Data Refinery flow +
Name
Type
Created by
Last modified
challengers.csv_flow
Data Refinery flow
Joshi Nandini
Dec 18, 2021, 11:57 PM

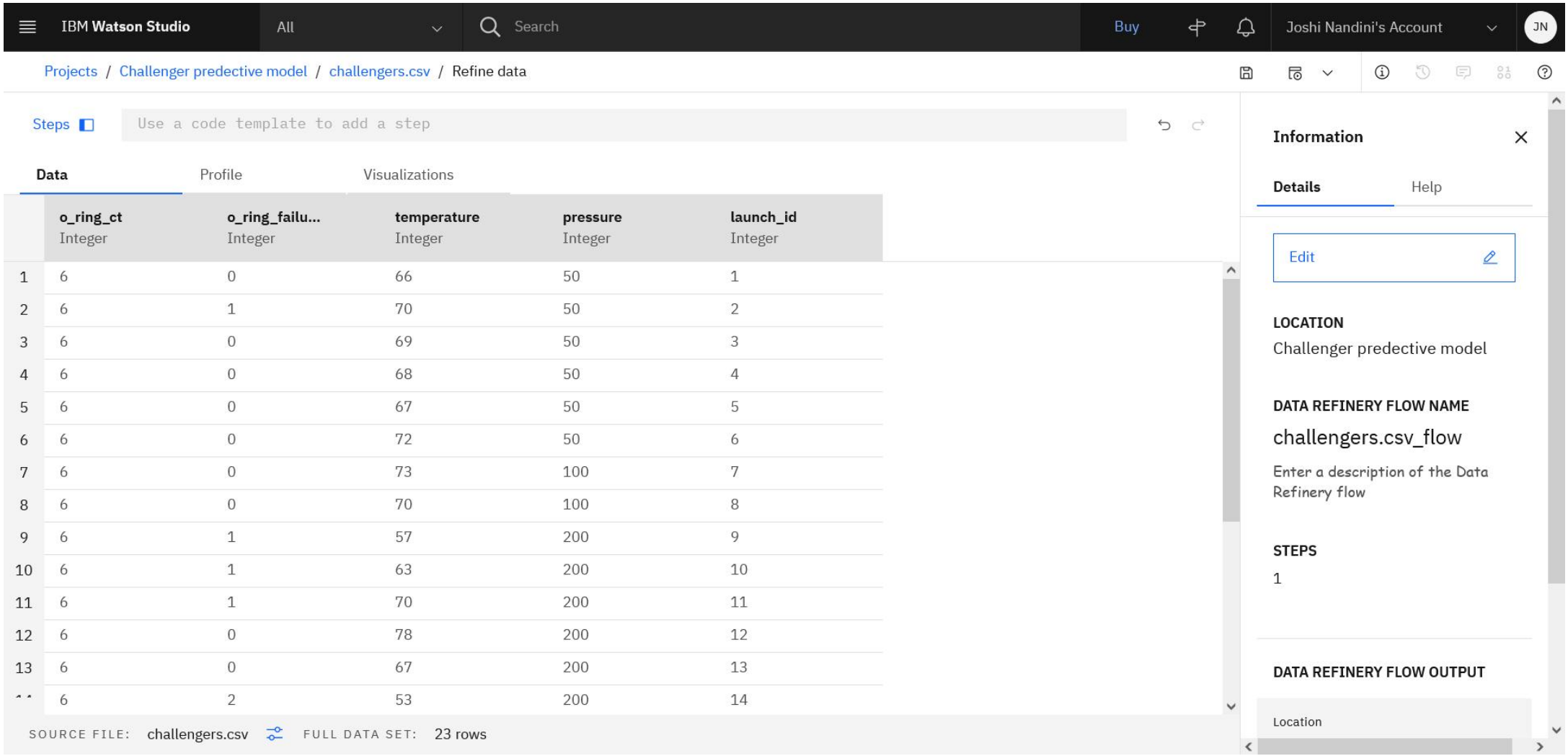
Preview | Activities | Visualization

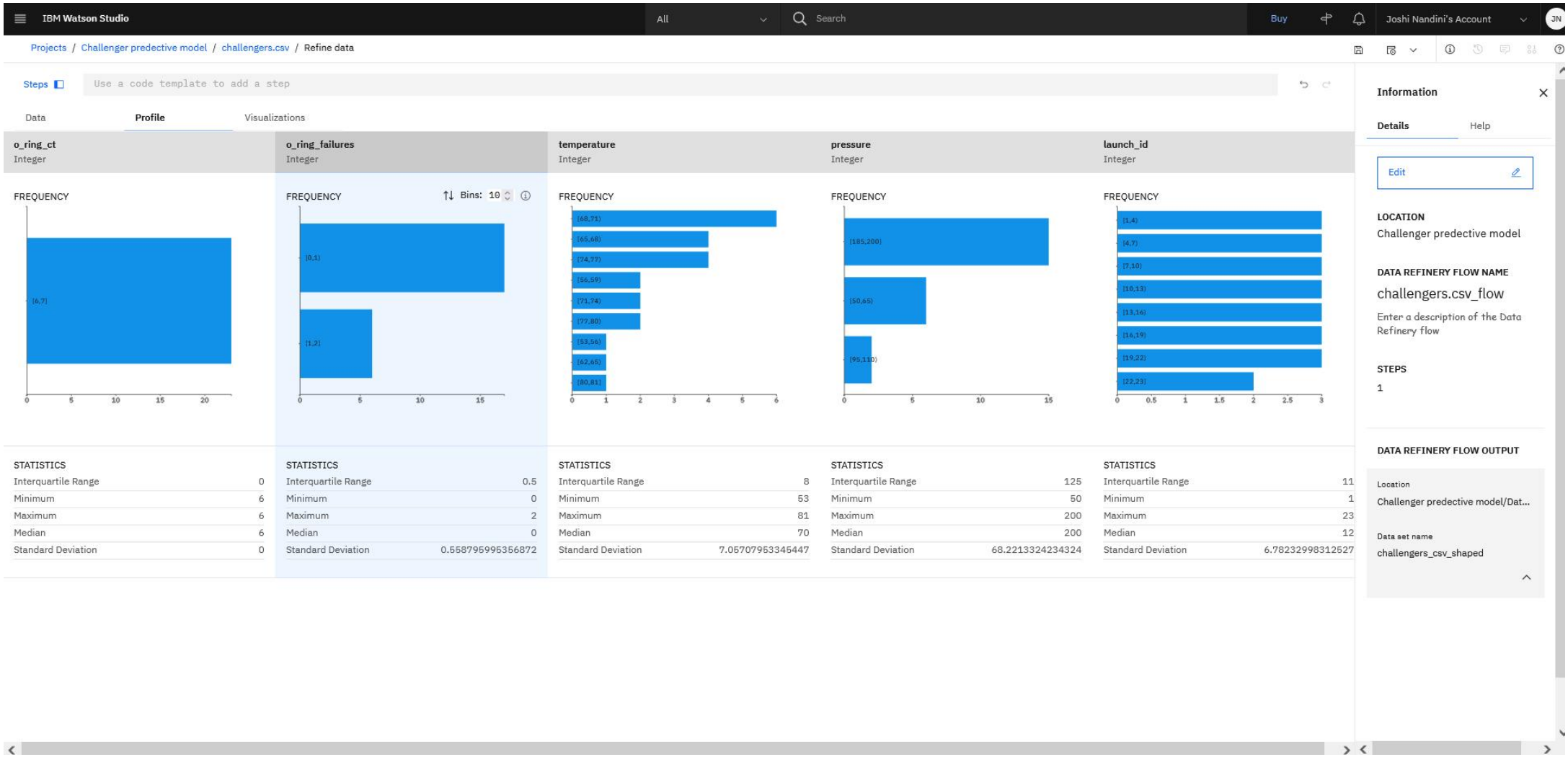
Schema: 5 Columns
Preview: 23 rows

Last refresh: 25 seconds ago

Refine

o_ring_ct String	o_ring_failures String	temperature String	pressure String	launch_id String
6	0	66	50	1
6	1	70	50	2
6	0	69	50	3
6	0	68	50	4
6	0	67	50	5
6	0	72	50	6
6	0	73	100	7
6	0	70	100	8
6	1	57	200	9
6	1	63	200	10
6	1	70	200	11
6	0	78	200	12
6	0	67	200	13
6	2	53	200	14
6	0	67	200	15
6	0	75	200	16
6	0	70	200	17
6	0	81	200	18
6	0	76	200	19
6	0	79	200	20
6	0	75	200	21
6	0	76	200	22
6	1	58	200	23


IBM Watson Studio
All
Search
Buy
Joshi Nandini's Account
JN
Projects / Challenger predective model / challengers.csv / Refine data
Steps
Use a code template to add a step
Data
Profile
Visualizations
o_ring_ct Integer
o_ring_failu... Integer
temperature Integer
pressure Integer
launch_id Integer
1 6 0 66 50 1
2 6 1 70 50 2
3 6 0 69 50 3
4 6 0 68 50 4
5 6 0 67 50 5
6 6 0 72 50 6
7 6 0 73 100 7
8 6 0 70 100 8
9 6 1 57 200 9
10 6 1 63 200 10
11 6 1 70 200 11
12 6 0 78 200 12
13 6 0 67 200 13
6 2 53 200 14
SOURCE FILE: challengers.csv
FULL DATA SET: 23 rows
Information
Details
Help
Edit
LOCATION
Challenger predective model
DATA REFINERY FLOW NAME
challengers.csv_flow
Enter a description of the Data Refinery flow
STEPS
1
DATA REFINERY FLOW OUTPUT
Location


IBM Watson Studio
All
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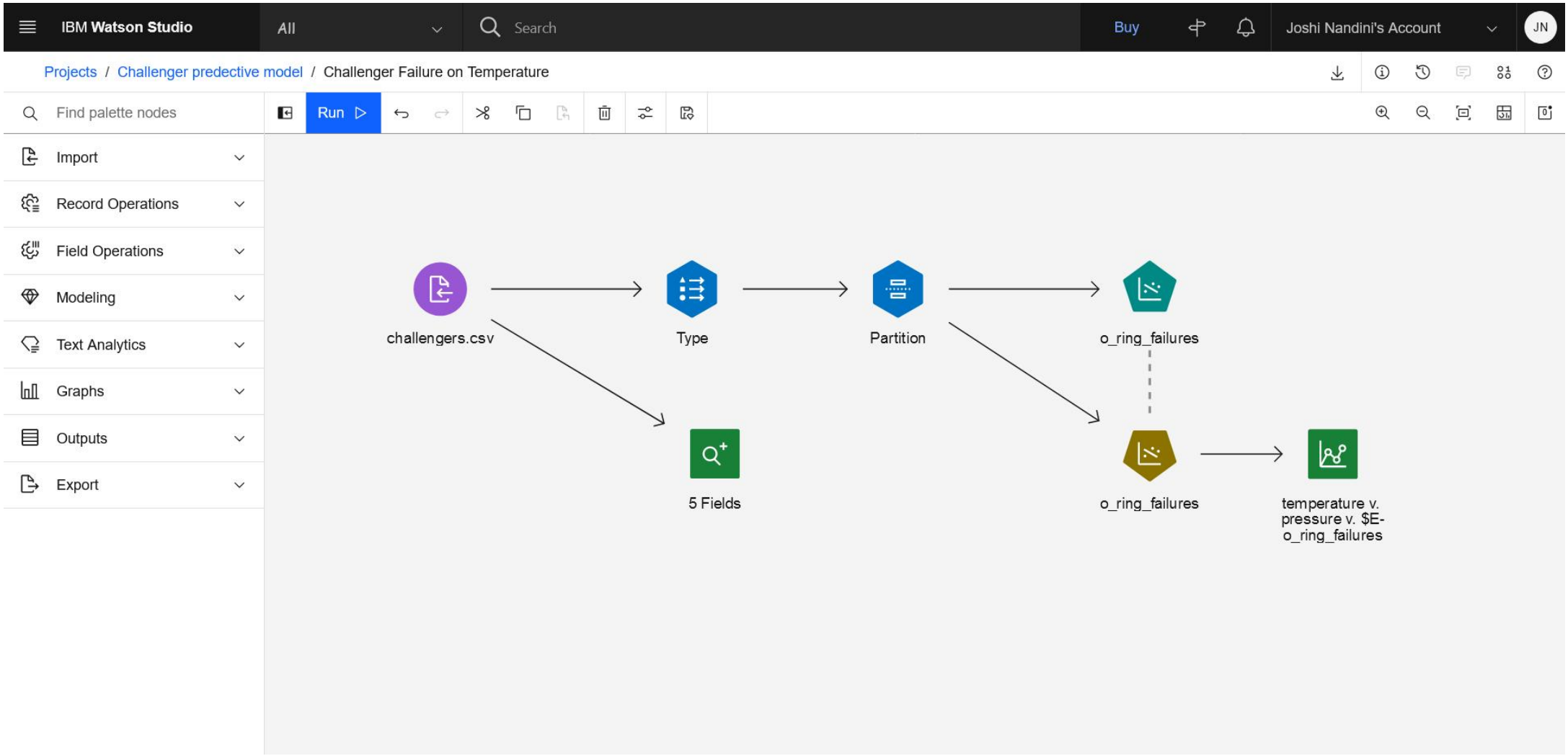
JN
Projects / Challenger predective model / challengers.csv / Refine data
Steps
Use a code template to add a step
Data
Profile
Visualizations
o_ring_ct
Integer
FREQUENCY
[6,7]
0 5 10 15 20
STATISTICS
Interquartile Range 0
Minimum 6
Maximum 6
Median 6
Standard Deviation 0
o_ring_failures
Integer
FREQUENCY
Bins: 10
[0,1)
[1,2]
0 5 10 15
STATISTICS
Interquartile Range 0.5
Minimum 0
Maximum 2
Median 0
Standard Deviation 0.558795995356872
temperature
Integer
FREQUENCY
[68,71)
[65,68)
[74,77)
[56,59)
[71,74)
[77,80)
[53,56)
[62,65)
[80,81]
0 1 2 3 4 5 6
STATISTICS
Interquartile Range 8
Minimum 53
Maximum 81
Median 70
Standard Deviation 7.05707953345447
pressure
Integer
FREQUENCY
[185,200]
[50,65)
[95,110)
0 5 10 15
STATISTICS
Interquartile Range 125
Minimum 50
Maximum 200
Median 200
Standard Deviation 68.2213324234324
launch_id
Integer
FREQUENCY
[1,4)
[4,7)
[7,10)
[10,13)
[13,16)
[16,19)
[19,22)
[22,23]
0 0.5 1 1.5 2 2.5 3
STATISTICS
Interquartile Range 11
Minimum 1
Maximum 23
Median 12
Standard Deviation 6.78232998312527
Information
Details
Help
Edit
LOCATION
Challenger predective model
DATA REFINERY FLOW NAME
challengers.csv_flow
Enter a description of the Data Refinery flow
STEPS
1
DATA REFINERY FLOW OUTPUT
Location
Challenger predective model/Dat...
Data set name
challengers_csv_shaped


IBM Watson Studio
All
Search
Buy
Joshi Nandini's Account
JN
Projects / Challenger predective model / Challenger Failure on Temperature
Find palette nodes
Run
Import
Record Operations
Field Operations
Modeling
Text Analytics
Graphs
Outputs
Export
challengers.csv
Type
Partition
o_ring_failures
5 Fields
o_ring_failures
temperature v. pressure v. $E-o_ring_failures

Type

Type

Settings

Default Mode

(•) Read metadata ( ) Pass (do not scan)

Type Operations

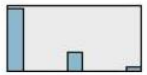
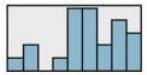
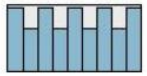
Read Values | Clear All Values

Find in column Field

	Field	Measure	Role	Value mode	Values	Check
☐	# o_ring_ct	Continuous	None	Instantiated	6, 6	None
☐	# o_ring_fail	Continuous	Target	Instantiated	0, 2	None
☐	# temperatui	Continuous	Input	Instantiated	53, 81	None
☐	# pressure	Continuous	Input	Instantiated	50, 200	None
☐	# launch_id	Continuous	None	Instantiated	1, 23	None

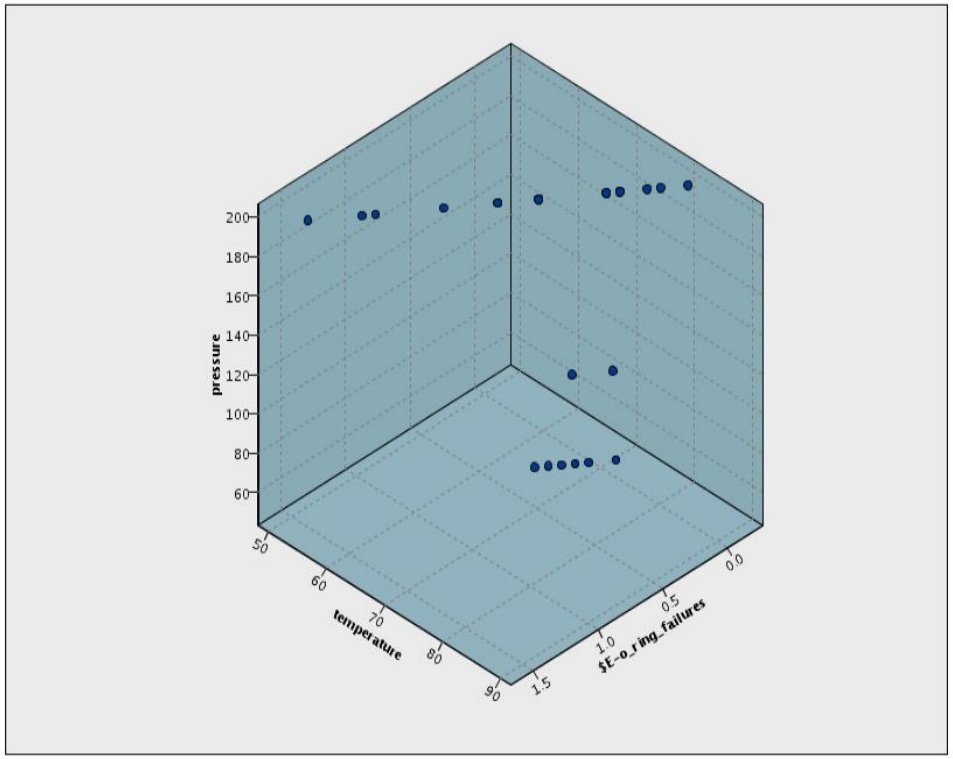
Cancel Save

View Output: Data Audit of [o_ring_ct o_ring_failures temperature pressure launch_id] #2

	Field	Graph	Measurement	Min	Max	Mean	Std. Dev	Skewness	Unique	Valid
1	o_ring_ct		Continuous	6	6	6	0	--	--	23
2	o_ring_failures		Continuous	0	2	0.304	0.559	1.735	--	23
3	temperature		Continuous	53	81	69.565	7.057	-0.654	--	23
4	pressure		Continuous	50	200	152.174	68.221	-0.791	--	23
5	launch_id		Continuous	1	23	12	6.782	0	--	23

	Field	Measurement	Outliers	Extremes	Action	Impute Missing	Method	% Complete	Valid Records	Null Value	Empty String
1	o_ring_ct	Continuous	0	0	None	Never	Fixed	100.000	23	0	0
2	o_ring_failures	Continuous	1	0	None	Never	Fixed	100.000	23	0	0
3	temperature	Continuous	0	0	None	Never	Fixed	100.000	23	0	0
4	pressure	Continuous	0	0	None	Never	Fixed	100.000	23	0	0
5	launch_id	Continuous	0	0	None	Never	Fixed	100.000	23	0	0

View Output: temperature v. pressure v. $E-o_ring_failures



View Model: o_ring_failures

Regression

EVALUATION

- Model Summary
- ANOVA
- Coefficients

MODEL VIEWER

- Build Settings
- Training Summary

Model Summary ⓘ

	1
R	0.822 [1]
R Square	0.676
Adjusted R Square	0.633
Std. Error of the Estimate	0.368

[1] Predictors: (Constant), [%1:, pressuretemperature

View Model: o_ring_failures

Regression

EVALUATION

Model Summary

ANOVA

Coefficients

MODEL VIEWER

Build Settings

Training Summary

ANOVA

	1		
	Regression	Residual	Total
Sum of Squares	4.243	2.034	6.278
df	2.000	15.000	17.000
Mean Square	2.122	0.136	
F	15.645		
Sig.	0.000		

View Model: o_ring_failures

Regression

EVALUATION

Model Summary

ANOVA

Coefficients

MODEL VIEWER

Build Settings

Training Summary

Coefficients

		1		
		(Constant)	temperature	pressure
Unstandardized Coefficients	B	4.181	-0.060	0.003
	Std. Error	0.832	0.012	0.001
Standardized Coefficients	Beta		-0.763	0.298
t		5.025	-5.194	2.027
Sig.		0.000	0.000	0.061
Fraction Missing Info.				
Relative Increase Variance				
Relative Efficiency				

View Model: o_ring_failures

Regression

EVALUATION

- Model Summary
- ANOVA
- Coefficients

MODEL VIEWER

- **Build Settings**
- Training Summary

Build Settings

Use partitioned data	true
Calculate predictor importance	true
Method	Enter
Include constant in equation	true
Use weight	false
Mode	Simple

View Model: o_ring_failures

Regression

EVALUATION

- Model Summary
- ANOVA
- Coefficients

MODEL VIEWER

- Build Settings
- Training Summary

Training Summary

Algorithm	Regression
Model type	Approximation
Date built	Sun Jan 09 17:01:42 UTC 2022
Elapsed time for model build	0 hours, 0 mins, 4 secs