Launch IDE ∨   ⓘ   ⊞ ?

Overview   **Assets**   Environments   Jobs   Access control   Settings

Data   ✕

Q What assets are you looking for?

Load   Files   Catalog

Data assets

0 assets selected.

Drop files here or browse for files to upload.

	Name	Type	created by	Last modified
☐	est challengers.csv	Data Asset	Sanyam Jain	Dec 19, 2021, 12:35 PN

Models

Watson Machine Learning models

Name	J'ype	Software specification	Last modified	↓
Multiple Regression temp pressure 0 ring Failures	spss-modeter 18.2	spss— modeler 18.2	Dec 19, 2021	
Regression Linear and Multiple	spss—modeler 18.2	spss— modeler 18.2	Dec 19, 2021	

,-,+   Launch IDE   Add to project   ⓘ   ⊞   ⍰

Watson Machine Learning models

Data   X

Name	Type	Software specification	Last modified ↓
Multiple Regression temp pressure 0 ring Failures	spss-modeler_18.2	spss-modeler_18.2	Dec 19, 2021
Regression Linear and Multiple	spss-modeler 18.2	spss-nlodeler 18.2	Dec 19. 2021

Load   Files   Catalog

Drop files here or browse for files to upload.

Modeler flows

New Modeler flow +

Name	Type	Created by	Last modified ↓
Challenger failure on Temprature	SPSS Modeler	Sanyam Jain	Dec 19, 2021, 01:39 PM

Data Refinery flows

New Data Refinery flow +

Name	Type	Created by	Last modified ↓
challengers.csv_flow	Data Refinery flow	Sanyam Jain	Dec 19, 2021, 12:49 PM

Multiple Regression temp pressure O ring Failures

Promote to deployment space

Overview   Activities

Input Schema

In put

Column	↑	Type
launch id		"integer"
a ring ct		"integer"
a ring failures		"integer"
pressure		"integer"
temperature		"integer"

Output

Column	↑	Type
$E-o_ring failures		"double"
Partition		"string"
launch id		"integer"
o_ring_ct		'integer'
a ring failures		"integer"
pressure		"integer"
temperature		"integer"

◆   ✕

Multiple Regression temp
pressure O ring Failures   ✎

Lost *modified at Dec 28, 202d 1:37 PM*

Description   ✎
multiple Regression Target --> 0 ring
Failure inpu -> pressure , temprature

Created
Dec 19, 20211:38 PM

Type
spss-modeler_18.2

Model TD
032ff944-9a1e-49d4-b2fa-a4d...   +[g

Software specification
spss-modeler 18.2

Hybrid pipeline software specifications

Tags   6
Add tags to make assets easier to find.

Steps   Use   a rocl e I entp T nt e to aclcl n step

Data   Profile   Visualizations

	o_ring_ct	o_ring_failu...	temperature	pressure	launch_id
	Integer	Integer	Integer	Integer	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
14	6	2	53	200	14

challengers.csv

Information

Details   Help

Edit ✎

LOCATION
Risk_Analysis_Space_Shuttle

DATA REFINERY FLOW NAME
challengers.csv_flow

Enter a description of the Data Refinery

STEPS
1

DATA REFINERY FLOW OUTPUT

Location

Q Find palette nodes

@+ Import
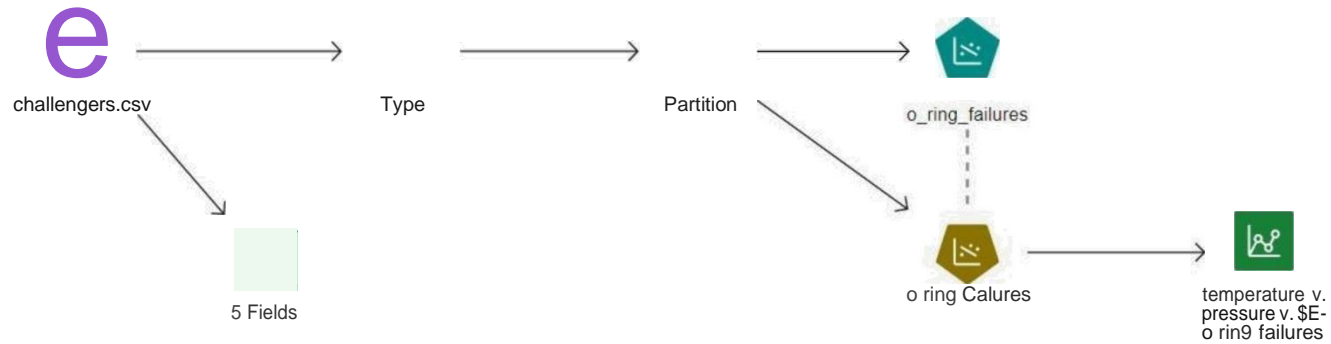
Record Operations ∨

Field Operations

@ Modeling ∨

Text Analytics ∨

|g|} Graphs

W Outputs

@-+ Export ∨

Run ▷

challengers.csv

Type

Partition

o_ring_failures

5 Fields

o ring Calures

temperature v. pressure v. $E- o rin9 failures

Type ⓘ

Type

Settings

Default Ivlode

Read metadata   Pass (do not scan)

Type Operations   v

Read Values | **Clear All Values**

Q Find in column Field

	Field	f¥leasure		Role		Value mode		Values	Check		
☐	t o ring ct	Continuous	v	None		Instantiated	v	6, 6	None	v	@
☐	@ o ring fail	Continuous	v	Target	v	Instantiated	v	0, 2	None	v	⚙
☐	@ temperatui	Continuous	v	Input	v	Instantiated	v	53, 81	None	v	⚙
☐	@ pressure	Continuous	v	Input	v	Instantiated	v	50, 200	None	v	⚙
☐	@ launch id	Continuous	v	None	v	Instantiated	v	1, 23	None	v	⚙

View Output: S Fields

	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		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

View Output: 5 Fields

	Field		Measurement							
3	temperature		Continuous	53	81	69.565	7.057	-0.654		23
4	pressure		Continuous	50	200	152.174	68221	-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	Goniinuous	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	Goniinuous	0	0	None	Never	Fixed	100.000	23	0	0
4	pressure	Gone in uous	0	0	None	Never	Fixed	100.000	23	0	0
5	launch id	Goniinuous	0	0	None	Never	Fixed	100.000	23	0	0

View Model: o ring failures

Regression

Model Summary O

	1
R	0.822
R Square	0.676
Adjusted R Square	0.633
Std. R ror of the Estimate	0.368

Predictors: (Constant), [%1 , pressuretemperature

View Model: o ring failures

Regression

ANOVA O

Model Summary

ANOVA

Coefficients

Build Settines

TialfiigSulmi

1

	Regression	Residual	Total
Shun 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

Coefficients O

		1	
	(Constant)	temperature	pressure
B	4.181	-0.060	0.003
Std. Rrror	0.83	0.012	0.001
Beta		-0.763	0.298
t	5.025	-1.194	2.027
Sig.	0.000	0.000	0.061
Fraction Missing Info.			

just CoefBcieate

Standardized Coefficients

View Model: o ring failures

Rep•ression

Build Settings O

h4odel Suinniary

ANOVA

Coefficieute

Build Settings

Trnining Sununary

Uee partitioned datn	true
Calculate predictor importance	true
Method	Eiiier
Include constant in equation	true
Use weight	false
Mode	Simple

View Model: o ring failures

Regression

Training Summary O

E\ILUATIOh

Model Summary

OVA

Coe&cients

BuJdS/dngs

igc/Buo	Regression
Model type	Approximation
Date built	Tire Dec 28 09:54:29 UTC 2021
Elapsed time for model build	0 hours. 0 niina. 3 seca

View Output: temperature v. pressure v. $E-o ring failures