Daily Weather Observations

Work Flow:

WEB SCRAPING

CLEANING

EDA

MODELING

Web Scraping:

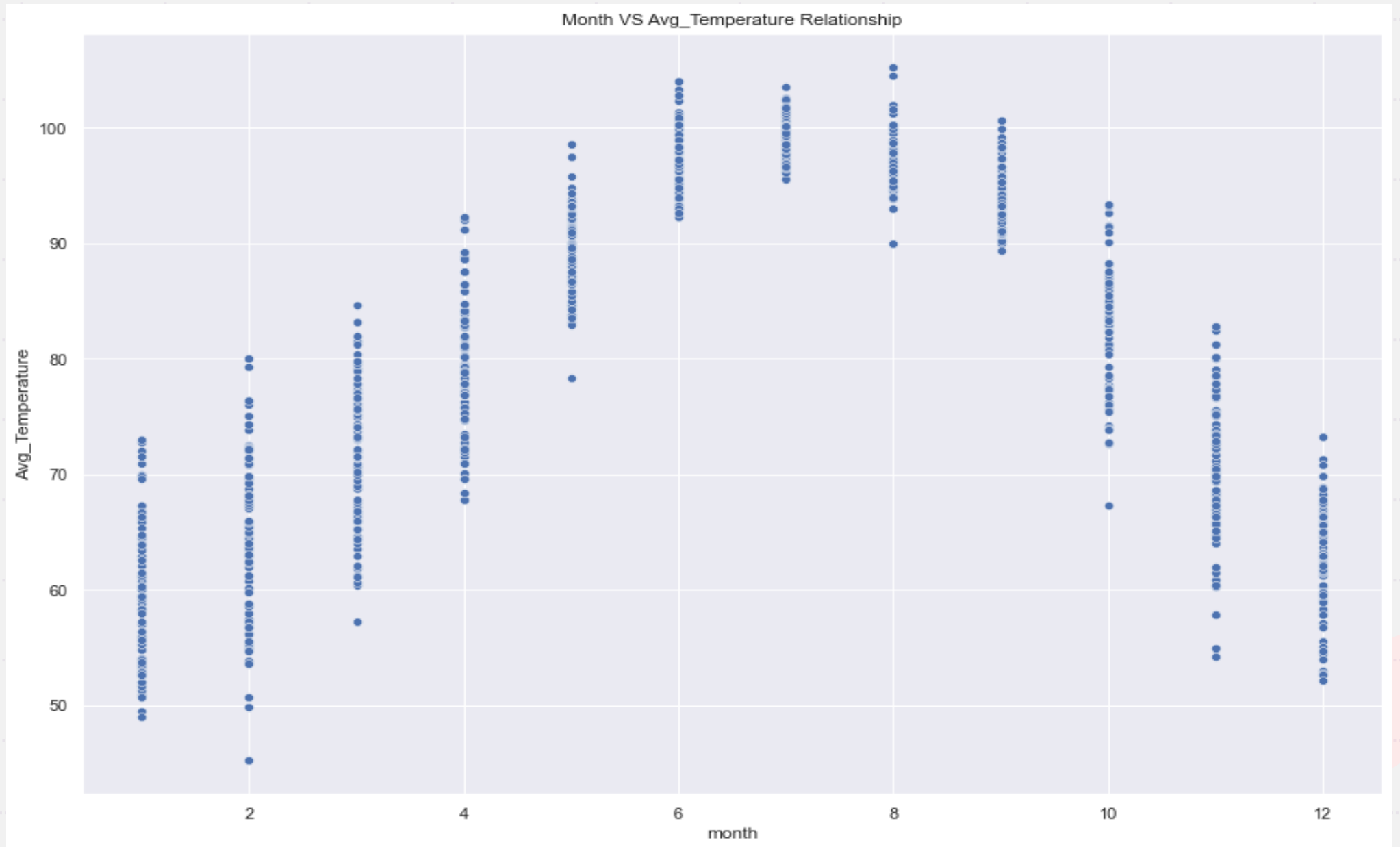## Daily Observations

Time	Temperature (° F)			Dew Point (° F)			Humidity (%)			Wind Speed (mph)			Pressure (Hg)			Precipitation
Dec	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Total
1	66	61.9	57	61	58.5	55	94	88.9	78	9	4.7	2	28.0	28.0	27.9	0.00
2	73	66.5	63	61	60.1	57	94	80.9	57	12	6.6	2	28.0	28.0	27.9	0.00
3	81	71.3	61	59	56.5	54	88	62.0	39	13	5.7	2	28.0	28.0	27.9	0.00
4	81	73.2	63	57	56.3	55	77	56.6	45	10	6.7	2	28.0	27.9	27.9	0.00
5	81	70.8	63	61	57.3	52	88	65.2	42	15	8.8	3	28.0	27.9	27.8	0.00
6	75	68.8	57	55	42.6	37	67	40.1	25	16	11.0	0	28.0	27.9	27.8	0.00
7	70	59.3	50	48	44.0	39	87	59.8	33	9	6.6	3	28.1	28.1	28.0	0.00
8	72	59.1	48	46	42.4	39	76	56.1	31	7	2.7	0	28.2	28.1	28.1	0.00
9	77	62.2	48	46	40.8	36	71	48.5	26	8	2.4	0	28.1	28.0	28.0	0.00
10	73	61.5	54	48	41.5	37	72	50.1	29	14	6.6	0	28.1	28.0	28.0	0.00
11	70	58.4	48	48	42.5	37	76	57.5	37	6	3.2	0	28.1	28.1	28.0	0.00
12	72	59.1	48	43	39.4	37	66	50.2	31	6	2.8	0	28.1	28.1	28.0	0.00
13	73	59.1	46	43	40.0	37	71	51.4	33	7	1.8	0	28.1	28.1	28.0	0.00
14	75	59.7	45	46	39.3	36	71	49.6	29	6	2.4	0	28.1	28.0	28.0	0.00
15	73	61.6	48	39	35.0	32	66	40.0	22	13	6.5	2	28.1	28.0	27.9	0.00
16	77	64.1	54	37	32.4	30	44	31.8	19	10	6.9	3	28.0	28.0	27.9	0.00
17	79	66.4	54	45	39.0	36	54	38.1	23	9	5.0	0	28.0	28.0	27.9	0.00

Cleaning:

	year	month	Day	Avg_Temperature	Avg_Dew_Point	Avg_Humidity	Avg_Wind_Speed	Avg_Pressure
0	2018.0	1.0	1	62.9	24.5	28.2	4.0	27.9
1	2018.0	1.0	2	59.6	30.0	33.5	8.8	27.9
2	2018.0	1.0	3	55.5	29.3	38.4	5.3	28.0
3	2018.0	1.0	4	56.0	26.8	34.7	3.5	28.0
4	2018.0	1.0	5	62.1	30.6	31.1	4.4	27.9
...	...	...	...	...	...	...	...	...
1003	2020.0	12.0	24	62.1	39.8	45.1	5.3	27.9
1004	2020.0	12.0	25	57.8	38.3	50.1	6.1	28.1
1005	2020.0	12.0	26	52.7	22.4	33.8	5.2	28.1
1006	2020.0	12.0	27	52.2	25.8	39.0	3.3	28.1
1007	2020.0	12.0	28	54.7	42.8	64.9	2.9	28.1

1008 rows × 8 columns

EDA:

Month VS Avg_Temperature Relationship

EDA:

EDA:

EDA:

Modeling:

Linear Regression Score:0.9298694716458178
Mean Squared Error:0.0003532593853183594
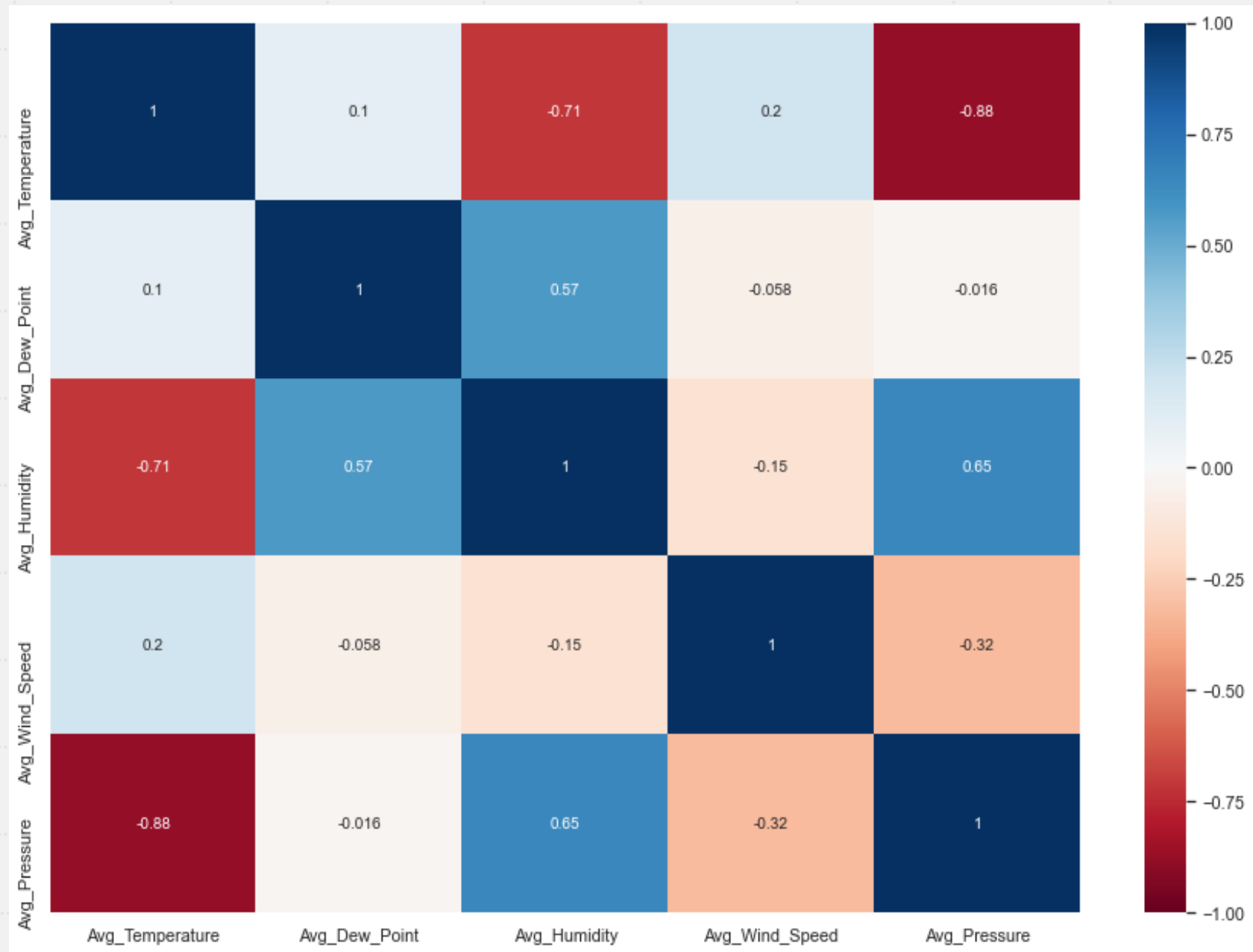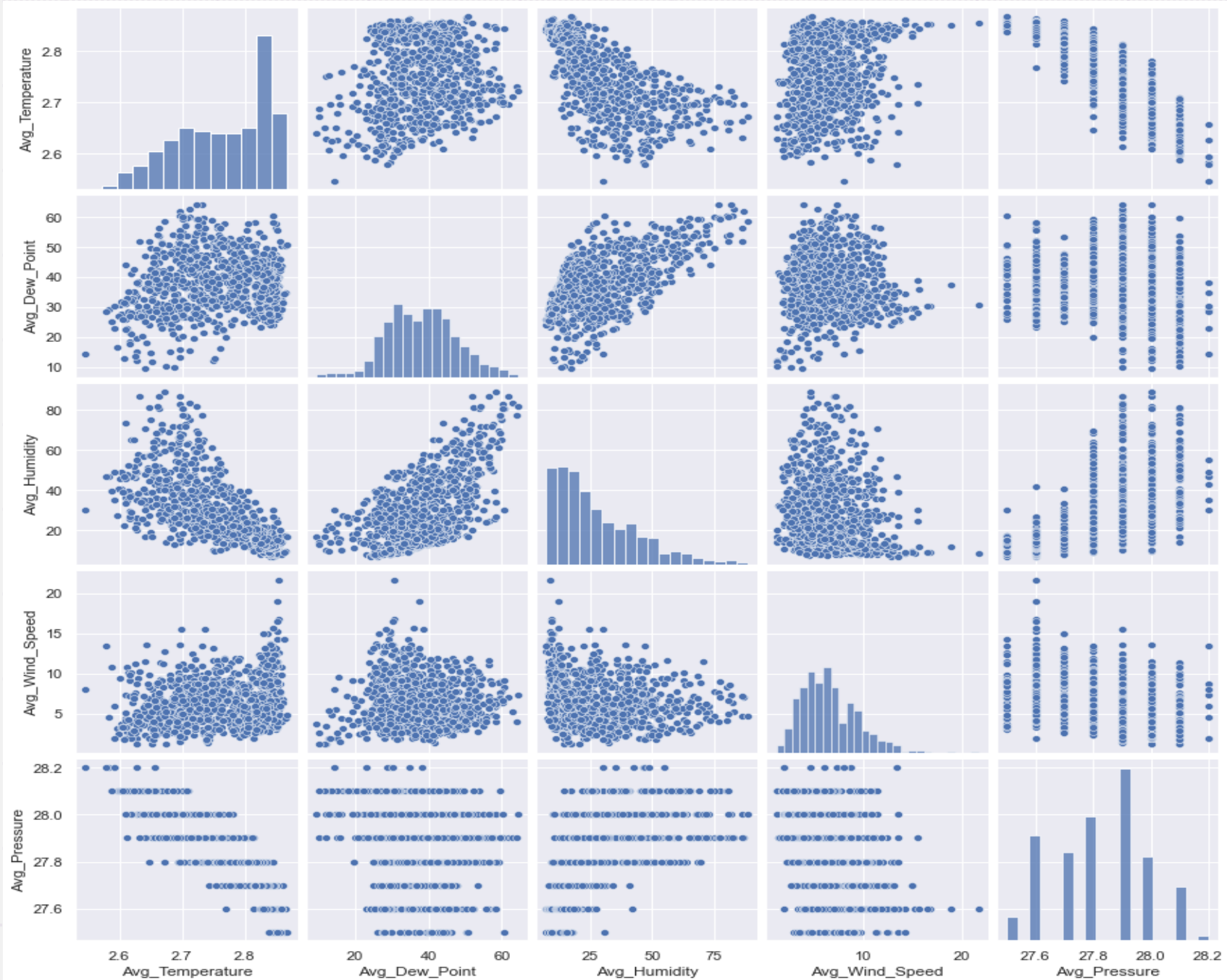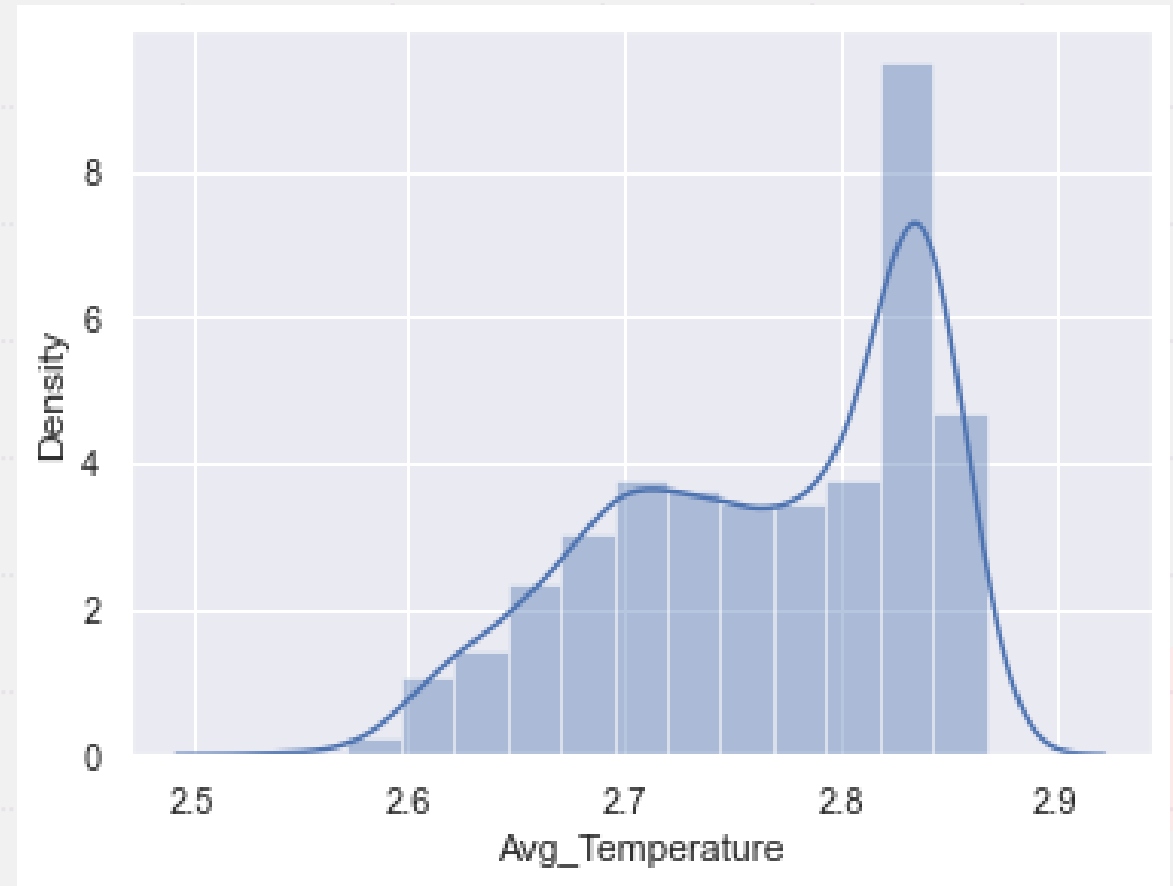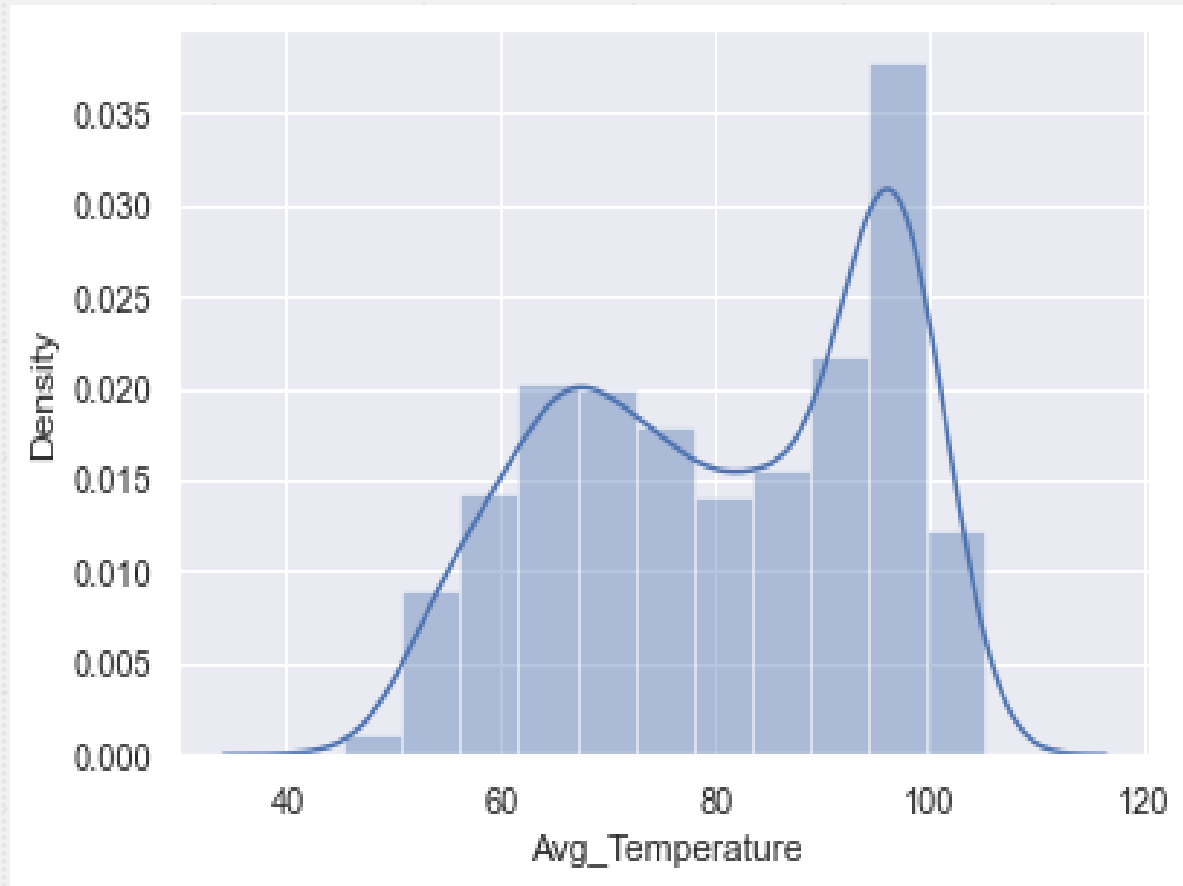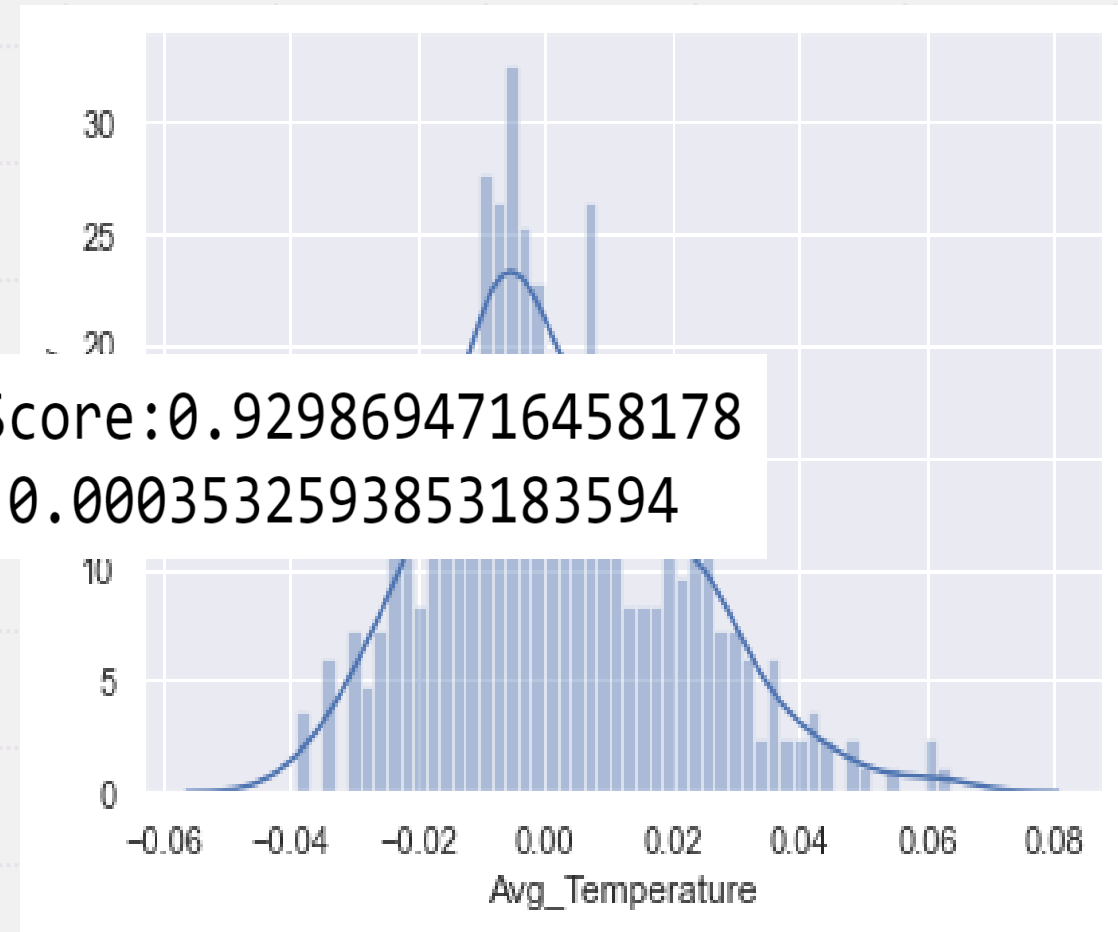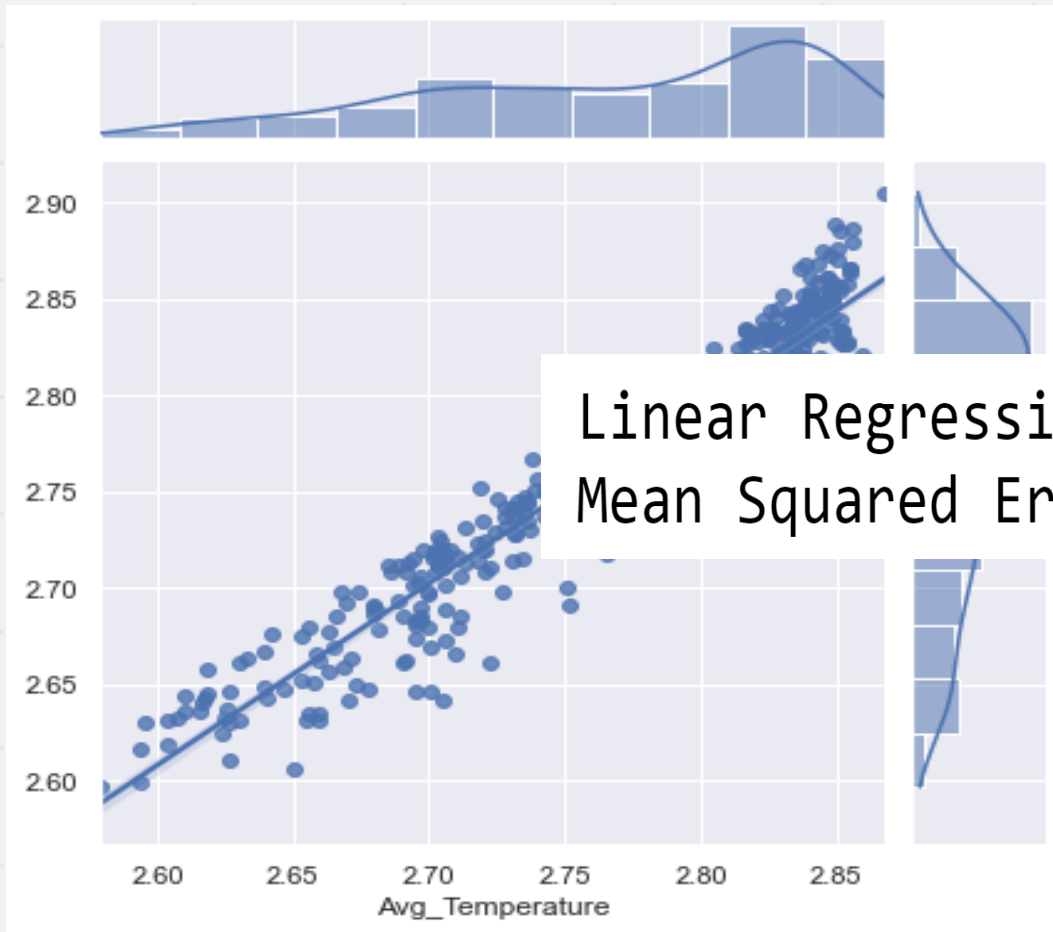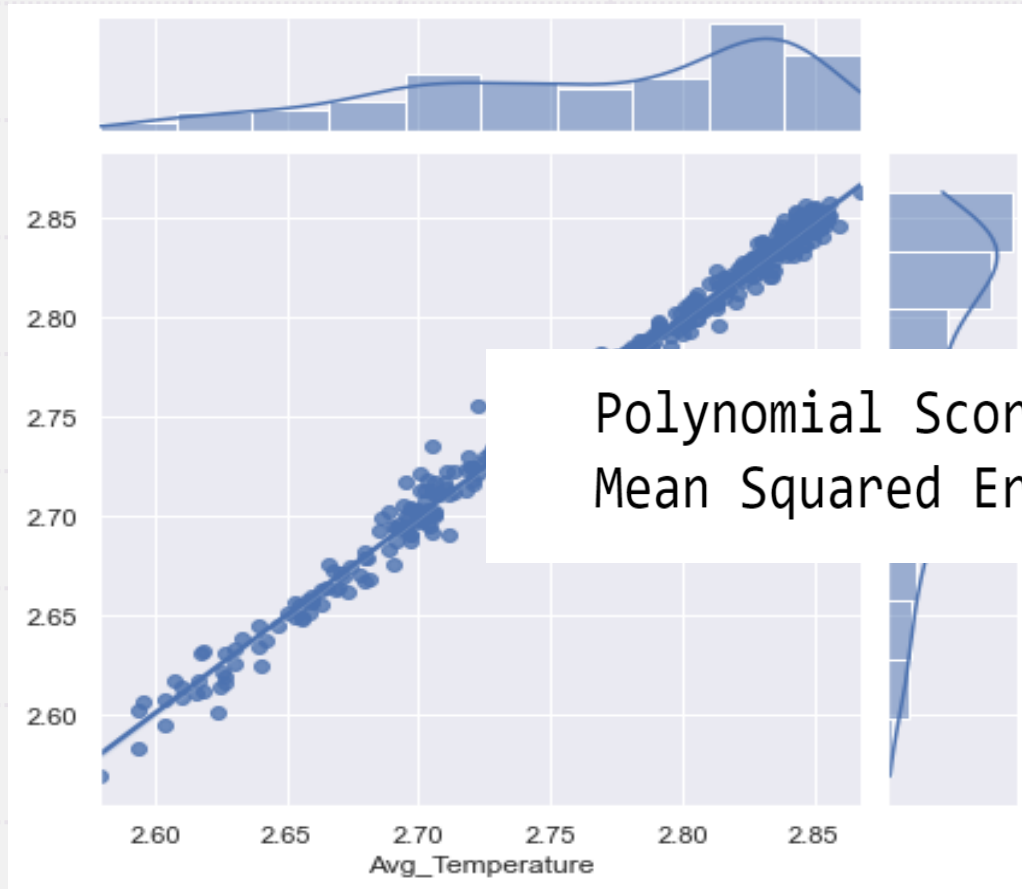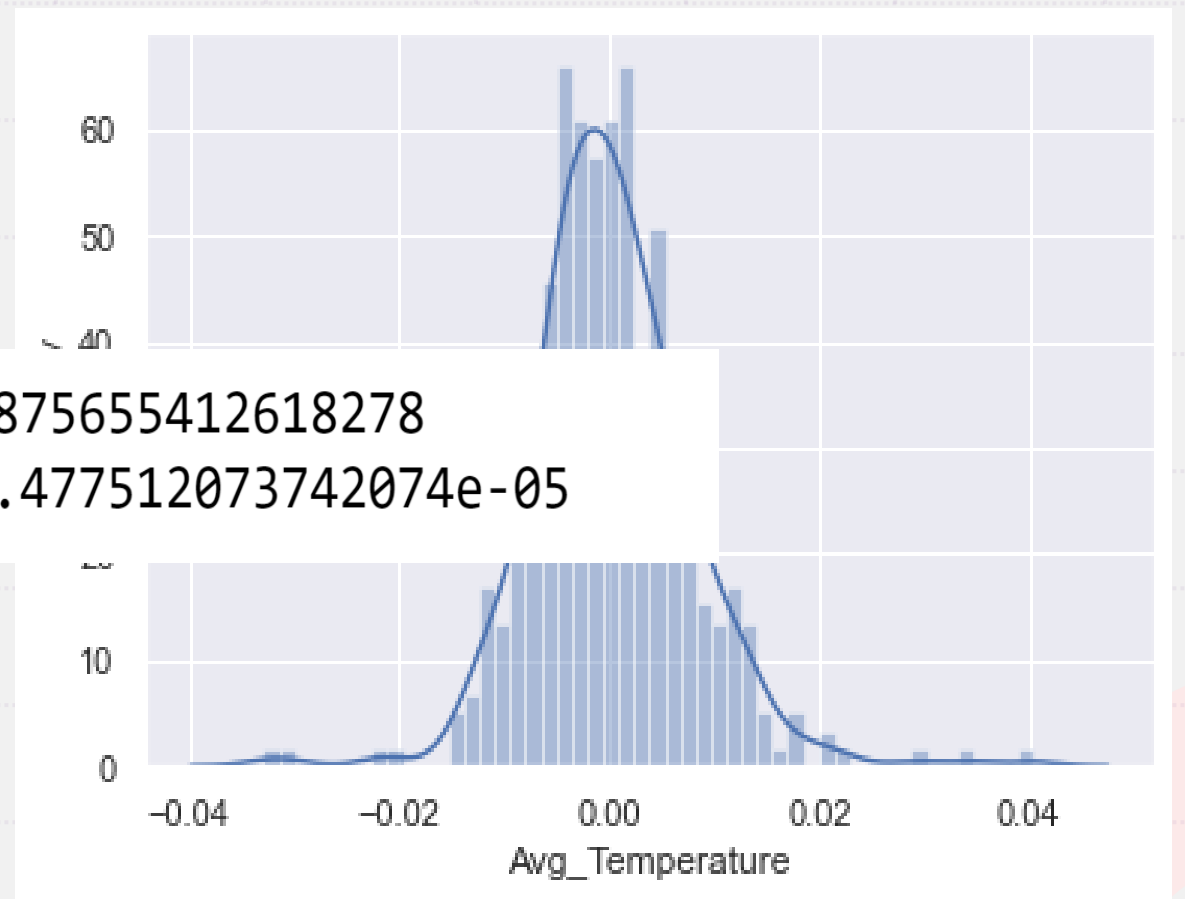
Modeling:

Polynomial Score:0.9875655412618278
Mean Squared Error:5.477512073742074e-05

Thank you for your listening