

Project Development Phase
SPRINT 1

Date	29 October 2022
Team ID	PNT2022TMID38957
Project Name	Emerging Methods For Early Detection Of Forest Fires

```
In [4]: import matplotlib.pyplot as plt
import numpy as np import pandas
as pd import seaborn as sns
from sklearn import metrics
from sklearn.metrics import classification_report, confusion_matrix
```

```
In [5]: import warnings
warnings.filterwarnings(action="ignore")
%matplotlib inline sns.set_style('darkgrid')
pd.set_option("display.max_rows",1000)
pd.set_option("display.max_columns",1000)
```

```
In [6]: fires = pd.read_csv(r"C:\Users\dhine\Downloads\forestfires.csv\forestfires.csv")
#show the first 15 instance of dataset fires.head(15)
```

Out[6]:	X Y month			day	FFMC DMC		DC	ISI temp RH wind rain area					
0	75	mar	fri		86.2	26.2	94.3	5.1	8.2	51	6.7	0.0	0.0
1	74	oct	tue		90.6	35.4	669.1	6.7	18.0	33	0.9	0.0	0.0
2	74	oct	sat		90.6	43.7	686.9	6.7	14.6	33	1.3	0.0	0.0
3	86	mar	fri		91.7	33.3	77.5	9.0	8.3	97	4.0	0.2	0.0
4	86	mar	sun		89.3	51.3	102.2	9.6	11.4	99	1.8	0.0	0.0
5	86	aug	sun		92.3	85.3	488.0	14.7	22.2	29	5.4	0.0	0.0
6	86	aug	mon		92.3	88.9	495.6	8.5	24.1	27	3.1	0.0	0.0
7	86	aug	mon		91.5	145.4	608.2	10.7	8.0	86	2.2	0.0	0.0
8	86	sep	tue		91.0	129.5	692.6	7.0	13.1	63	5.4	0.0	0.0
9	75	sep	sat		92.5	88.0	698.6	7.1	22.8	40	4.0	0.0	0.0
10	75	sep	sat		92.5	88.0	698.6	7.1	17.8	51	7.2	0.0	0.0
11	75	sep	sat		92.8	73.2	713.0	22.6	19.3	38	4.0	0.0	0.0
12	65	aug	fri		63.5	70.8	665.3	0.8	17.0	72	6.7	0.0	0.0
13	65	sep	mon		90.9	126.5	686.5	7.0	21.3	42	2.2	0.0	0.0

4.5 0.0 14 6 5 sep wed 92.9 133.3 699.6 9.2 26.4 21
In [7]:

```
fires.shape
```

```
(517, 13)
```

Out[7]: In [8]:

Out[8]:

```
#show the last 10 instances of dataset fires.tail(15)
```

X Y month
day FFMC

DMC DC

ISI temp RH wind rain				area								
502	44	aug	tue	96.1	181.1	671.2	14.3	20.7	69	4.9	0.4	0.00
503	24	aug	wed	94.5	139.4	689.1	20.0	29.2	30	4.9	0.0	1.95
504	43	aug	wed	94.5	139.4	689.1	20.0	28.9	29	4.9	0.0	49.59
505	12	aug	thu	91.0	163.2	744.4	10.1	26.7	35	1.8	0.0	5.80
506	12	aug	fri	91.0	166.9	752.6	7.1	18.5	73	8.5	0.0	0.00
507	24	aug	fri	91.0	166.9	752.6	7.1	25.9	41	3.6	0.0	0.00
508	12	aug	fri	91.0	166.9	752.6	7.1	25.9	41	3.6	0.0	0.00
509	54	aug	fri	91.0	166.9	752.6	7.1	21.1	71	7.6	1.4	2.17
510	65	aug	fri	91.0	166.9	752.6	7.1	18.2	62	5.4	0.0	0.43
511	86	aug	sun	81.6	56.7	665.6	1.9	27.8	35	2.7	0.0	0.00
512	43	aug	sun	81.6	56.7	665.6	1.9	27.8	32	2.7	0.0	6.44
513	24	aug	sun	81.6	56.7	665.6	1.9	21.9	71	5.8	0.0	54.29
514	74	aug	sun	81.6	56.7	665.6	1.9	21.2	70	6.7	0.0	11.16
515	14	aug	sat	94.4	146.0	614.7	11.3	25.6	42	4.0	0.0	0.00

31 4.5 516 6 3 nov tue 79.5 3.0 106.7 1.1 11.8
0.0 0.00

In [9]: fires.info()

```
<class 'pandas.core.frame.DataFrame'>  
RangeIndex: 517 entries, 0 to 516 Data  
columns (total 13 columns):  
#    Column Non-Null Count  Dtype  
----
```

```
0    X          517 non-null    int64
```

```

1  Y      517 non-null    int64
2  month  517 non-null    object
3  day    517 non-null    object
4  FFMC   517 non-null    float64
5  DMC    517 non-null    float64
6  DC     517 non-null    float64
7  ISI    517 non-null    float64
8  temp   517 non-null    float64
9  RH     517 non-null    int64
10 wind   517 non-null    float64
11 rain   517 non-null    float64
12 area   517 non-null    float64
dtypes: float64(8), int64(3), object(2) memory
usage: 52.6+ KB

```

```

In [10]: #generate descriptive statistics of each attribute fires.describe().T
Out[10]:

```

X	517.0	4.669246	2.313778	1.0	3.0	4.00	7.00	9.00
Y	517.0	4.299807	1.229900	2.0	4.0	4.00	5.00	9.00
FFMC	517.0	90.644681	5.520111	18.7	90.2	91.60	92.90	96.20
DMC	517.0	110.872340	64.046482	1.1	68.6	108.30	142.40	291.30
DC	517.0	547.940039	248.066192	7.9	437.7	664.20	713.90	860.60
ISI	517.0	9.021663	4.559477	0.0	6.5	8.40	10.80	56.10
temp	517.0	18.889168	5.806625	2.2	15.5	19.30	22.80	33.30
RH	517.0	44.288201	16.317469	15.0	33.0	42.00	53.00	100.00
wind	517.0	4.017602	1.791653	0.4	2.7	4.00	4.90	9.40
rain	517.0	0.021663	0.295959	0.0	0.0	0.00	0.00	6.40
area	517.0	12.847292	63.655818	0.0	0.0	0.52	6.57	1090.84

```

In [11]: fires['area'].values[fires['area'].values >0] = 1
#renaming the area attribute to output for clear understanding
fires = fires.rename(columns={'area': 'output'}) fires.head(10)

```

```

Out[11]:

```

	X	Y	month	day	FFMC	DMC	DC	ISI	temp	RH	wind	rain	output
0	7	5	mar	fri	86.2	26.2	94.3	5.1	8.2	51	6.7	0.0	0.0
1	7	4	oct	tue	90.6	35.4	669.1	6.7	18.0	33	0.9	0.0	0.0
2	7	4	oct	sat	90.6	43.7	686.9	6.7	14.6	33	1.3	0.0	0.0
3	8	6	mar	fri	91.7	33.3	77.5	9.0	8.3	97	4.0	0.2	0.0

4	8	6	mar	sun	89.3	51.3	102.2	9.6	11.4	99	1.8	0.0	0.0
5	8	6	aug	sun	92.3	85.3	488.0	14.7	22.2	29	5.4	0.0	0.0
6	8	6	aug	mon	92.3	88.9	495.6	8.5	24.1	27	3.1	0.0	0.0
7	8	6	aug	mon	91.5	145.4	608.2	10.7	8.0	86	2.2	0.0	0.0
8	8	6	sep	tue	91.0	129.5	692.6	7.0	13.1	63	5.4	0.0	0.0
9	7	5	sep	sat	92.5	88.0	698.6	7.1	22.8	40	4.0	0.0	0.0

In [12]: fires.corr()
Out[12]:

X	1.000000	0.539548	-0.021039	-0.048384	-0.085916	0.006210	-0.051258	0.085223	0.018798	0.065387
Y	0.539548	1.000000	-0.046308	0.007782	-0.101178	-0.024488	-0.024103	0.062221	-0.020341	0.033234
FFMC	-0.021039	-0.046308	1.000000	0.382619	0.330512	0.531805	0.431532	-0.300995	-0.028485	0.056702
DMC	-0.048384	0.007782	0.382619	1.000000	0.682192	0.305128	0.469594	0.073795	-0.105342	0.074790
DC	-0.085916	-0.101178	0.330512	0.682192	1.000000	0.229154	0.496208	-0.039192	-0.203466	0.035861
ISI	0.006210	-0.024488	0.531805	0.305128	0.229154	1.000000	0.394287	-0.132517	0.106826	0.067668
temp	-0.051258	-0.024103	0.431532	0.469594	0.496208	0.394287	1.000000	-0.527390	-0.227116	0.069491
RH	0.085223	0.062221	-0.300995	0.073795	-0.039192	-0.132517	-0.527390	1.000000	0.069410	0.099751
wind	0.018798	-0.020341	-0.028485	-0.105342	-0.203466	0.106826	-0.227116	0.069410	1.000000	0.061119
rain	0.065387	0.033234	0.056702	0.074790	0.035861	0.067668	0.069491	0.099751	0.061119	1.000000

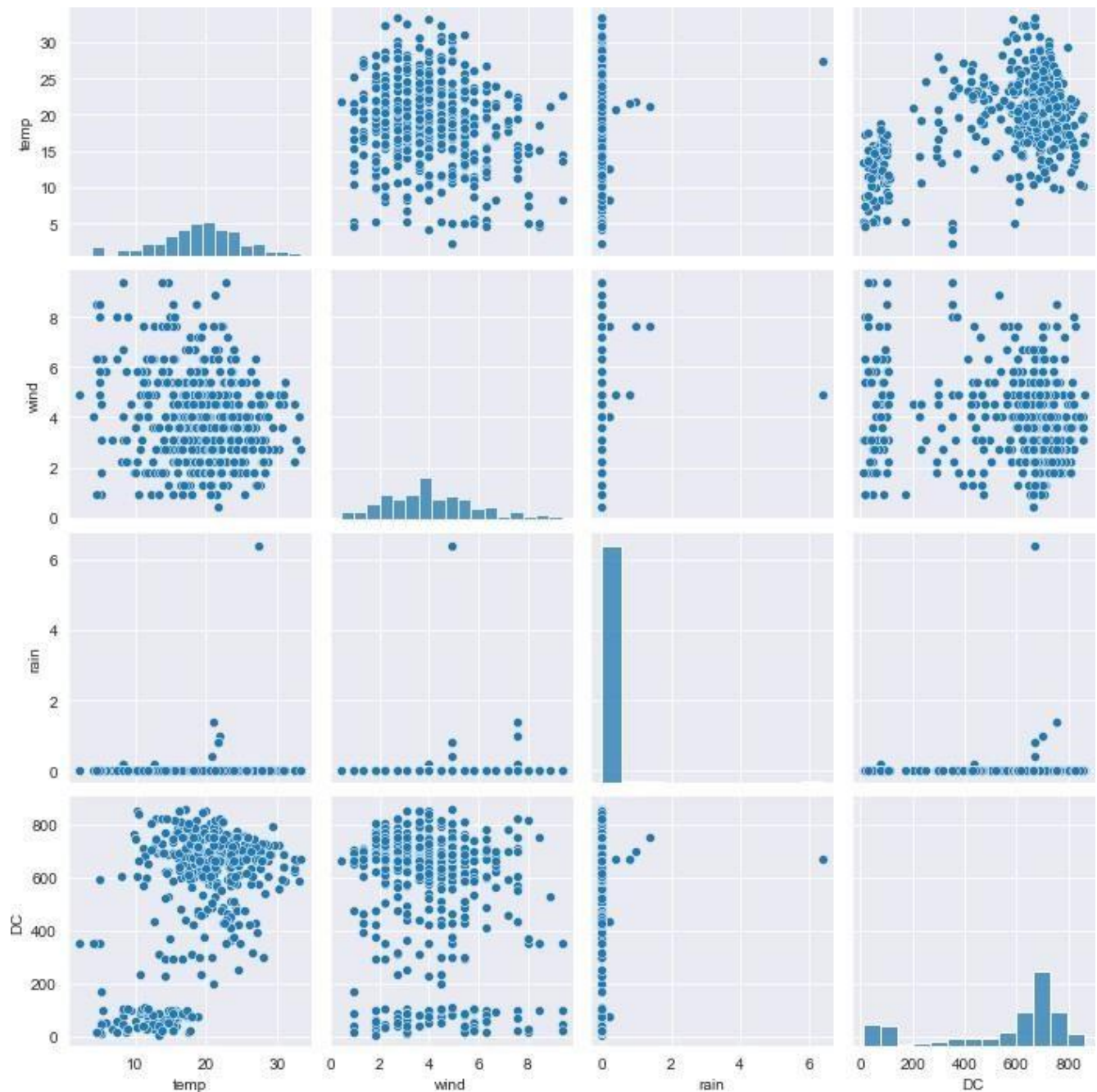
In [15]: numerical_feature = fires.describe(include=["int", "float"]).columns

Print it in List type ..
print(list(numerical_feature))

```
sns.set_style('darkgrid')
# Find the relation
# plt.subplot(fires)
sns.pairplot(fires[["temp", "wind", "rain", "DC"]])
plt.show()
```

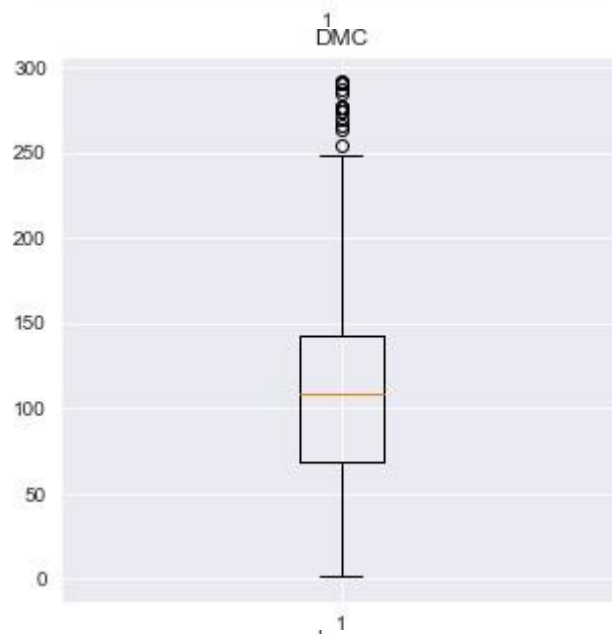
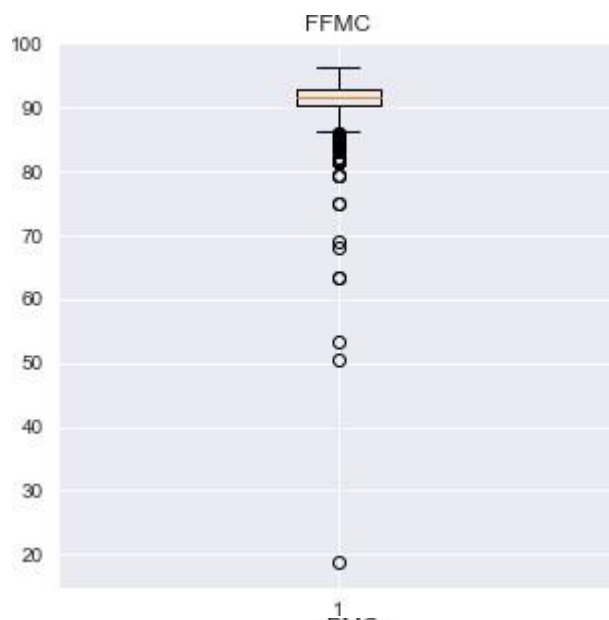
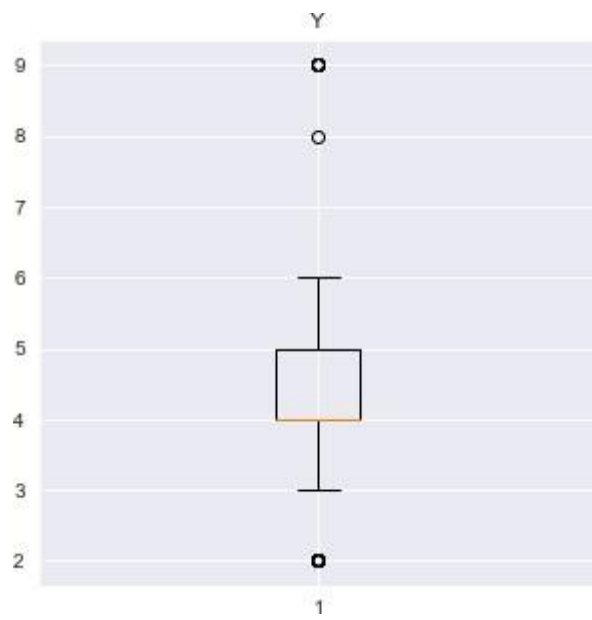
['X', 'Y', 'FFMC', 'DMC', 'DC', 'ISI', 'temp', 'RH', 'wind', 'rain', 'output']

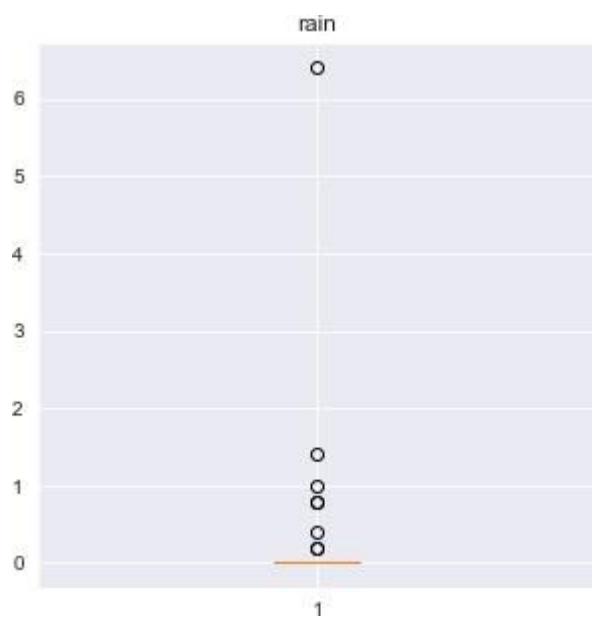
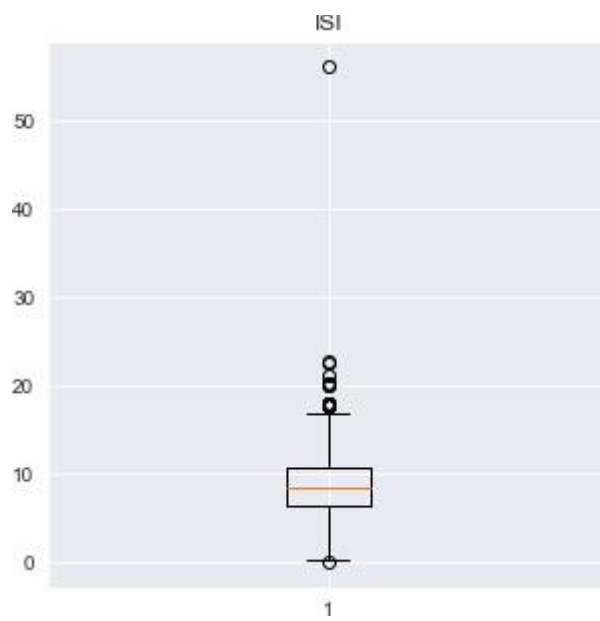
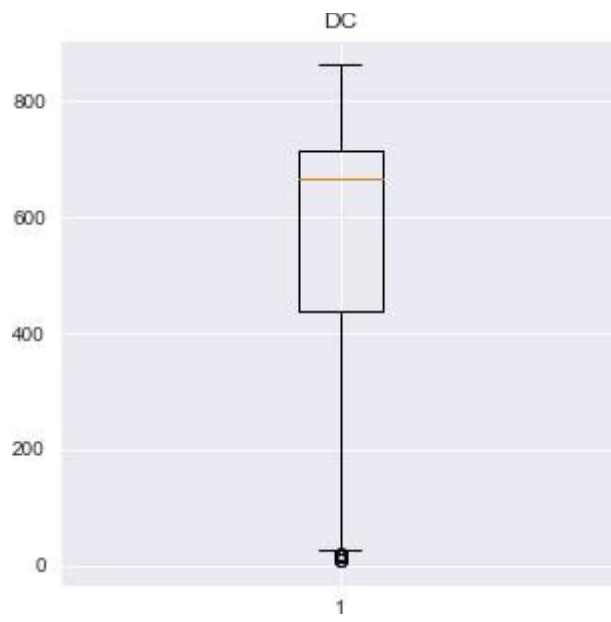
In [16]:

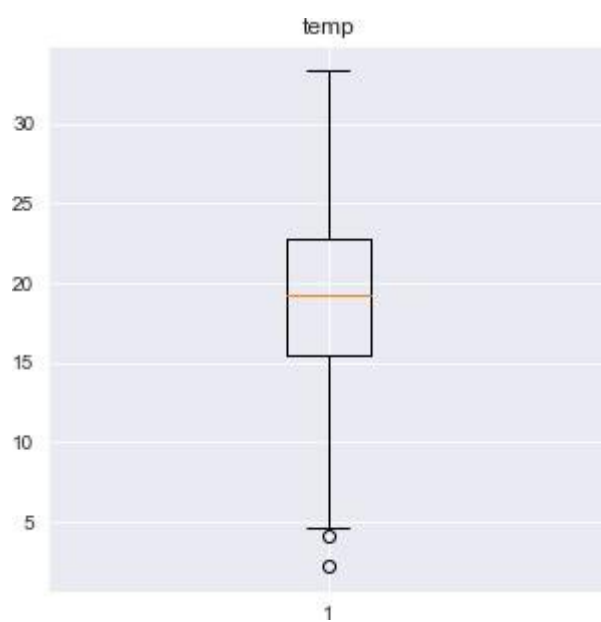
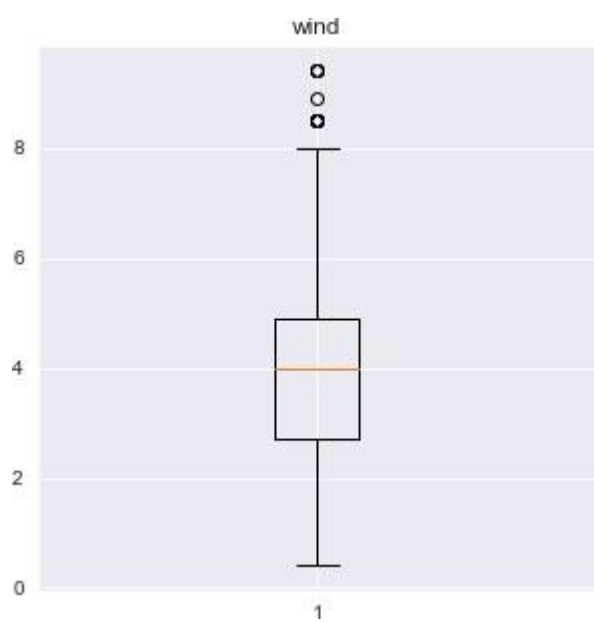
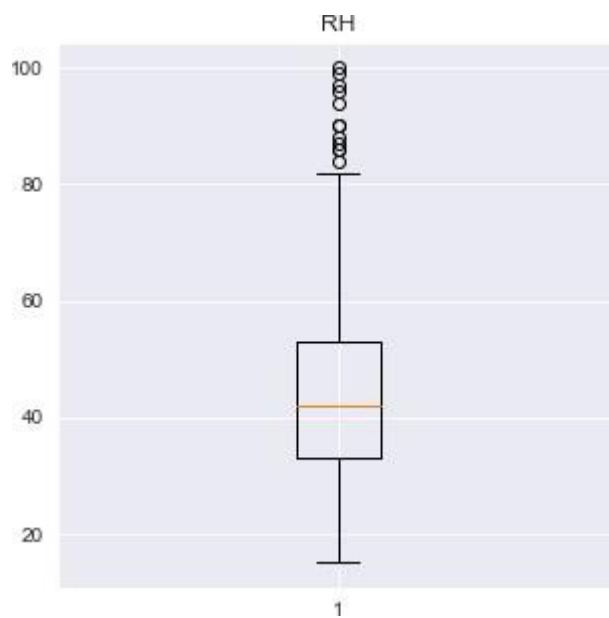


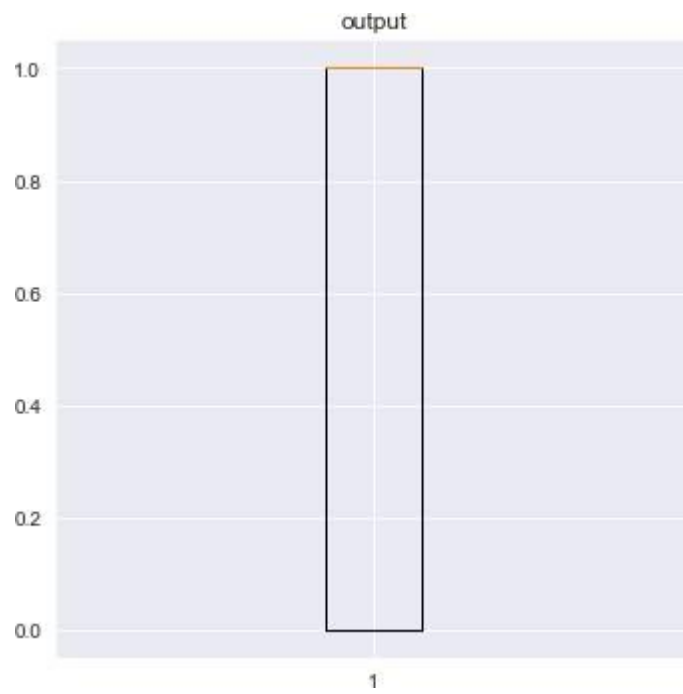
```
In [17]: for idx, col in enumerate(numerical_feature, 1):
plt.figure(figsize=(5,5))

# plt.subplot(len(numerical_feature) // 2, 3, idx) plt.boxplot(fires[col])
plt.title(col)
# plt.hist(fires[col])
plt.tight_layout()
plt.show(plt)
```



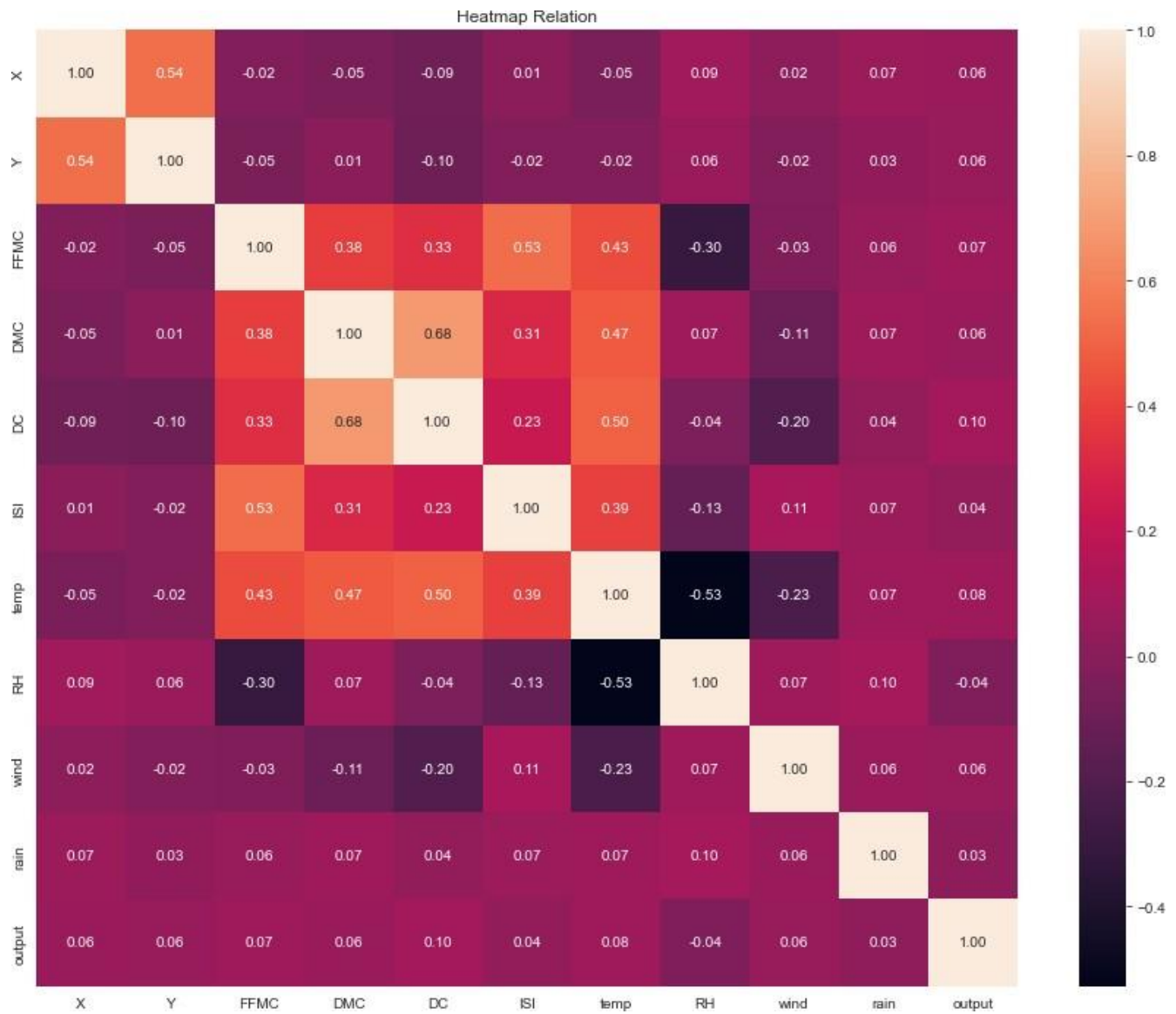






In [18]:

```
plt.figure(figsize=(15, 12))    plt.title("Heatmap Relation")
sns.heatmap(fires[numerical_feature].corr(), annot=True, fmt='.2f');
```



```
In [19]: highest_rain = fires.sort_values(by='rain', ascending=False)[['month', 'day', 'rain']].head()
highest_rain
```

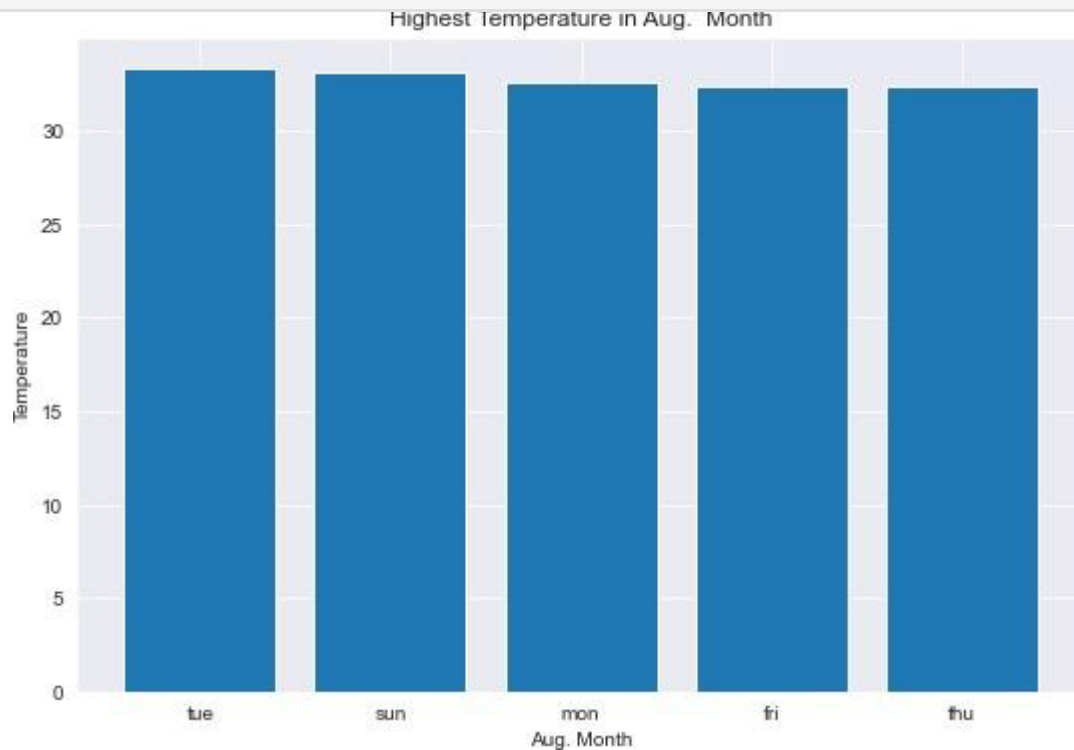
```
Out[19]:
```

	month	day	rain
499	aug	tue	6.4
509	aug	fri	1.4
243	aug	sun	1.0
500	aug	tue	0.8

```
In [20]: highest_temp = fires.sort_values(by='temp', ascending=False)[['month', 'day', 'temp']].head()
plt.figure(figsize=(9, 6))
plt.title("Highest Temperature in Aug. Month")
plt.bar(highest_temp['day'], highest_temp['temp'])

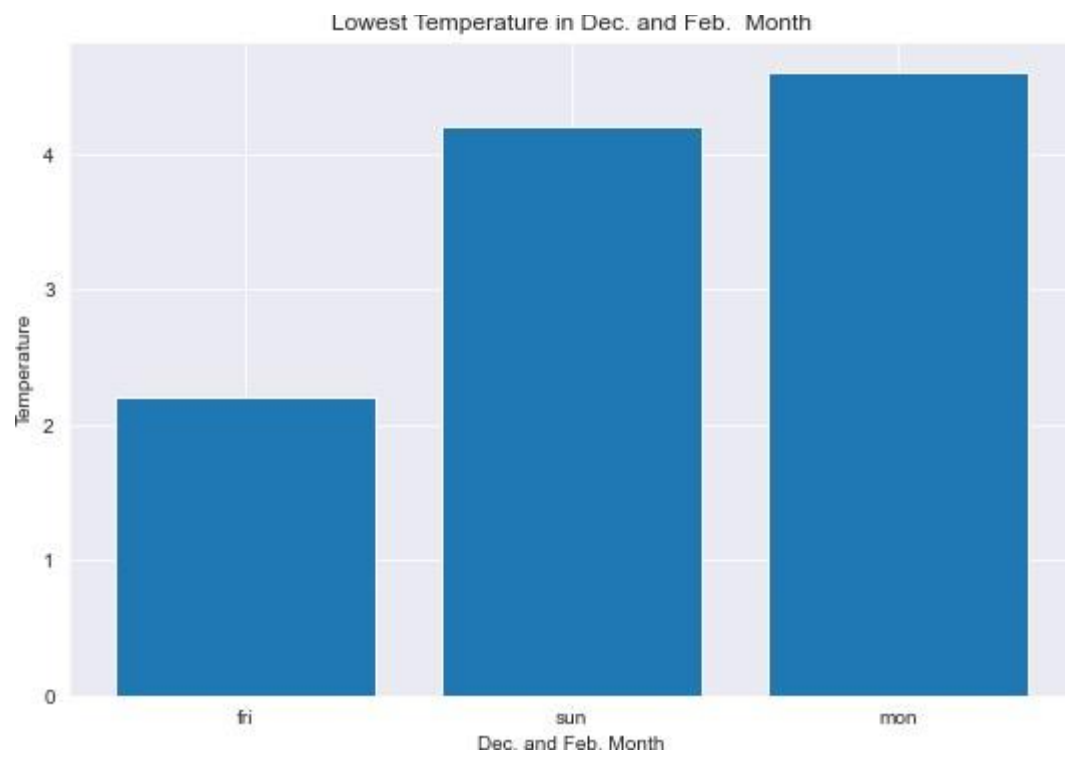
plt.xlabel("Day") plt.xlabel("Aug.
Month")

plt.ylabel("Temperature") plt.show()
```



```
In [21]: lowest_temp = fires.sort_values(by='temp', ascending=True)[['month', 'day', 'temp']].head()
plt.figure(figsize=(9, 6))
plt.title("Lowest Temperature in Dec. and Feb. Month")
plt.bar(lowest_temp['day'], lowest_temp['temp'])

plt.xlabel("Day")
plt.xlabel("Dec. and Feb. Month")
plt.ylabel("Temperature") plt.show()
```



In [22]: fires

Out[22]:

X	Y	month	day	FFMC	DMC	DC	ISI	temp	RH	wind	rain	output
---	---	-------	-----	------	-----	----	-----	------	----	------	------	--------

	0	7	5	mar	fri	86.2	26.2	94.3	5.1	8.2	51	6.7	0.0	0.0
	1	7	4	oct	tue	90.6	35.4	669.1	6.7	18.0	33	0.9	0.0	0.0
	2	7	4	oct	sat	90.6	43.7	686.9	6.7	14.6	33	1.3	0.0	0.0
	3	8	6	mar	fri	91.7	33.3	77.5	9.0	8.3	97	4.0	0.2	0.0
	4	8	6	mar	sun	89.3	51.3	102.2	9.6	11.4	99	1.8	0.0	0.0
	5	8	6	aug	sun	92.3	85.3	488.0	14.7	22.2	29	5.4	0.0	0.0
	6	8	6	aug	mon	92.3	88.9	495.6	8.5	24.1	27	3.1	0.0	0.0
	7	8	6	aug	mon	91.5	145.4	608.2	10.7	8.0	86	2.2	0.0	0.0
	8	8	6	sep	tue	91.0	129.5	692.6	7.0	13.1	63	5.4	0.0	0.0
	9	7	5	sep	sat	92.5	88.0	698.6	7.1	22.8	40	4.0	0.0	0.0
	10	7	5	sep	sat	92.5	88.0	698.6	7.1	17.8	51	7.2	0.0	0.0
	11	7	5	sep	sat	92.8	73.2	713.0	22.6	19.3	38	4.0	0.0	0.0
	12	6	5	aug	fri	63.5	70.8	665.3	0.8	17.0	72	6.7	0.0	0.0
	13	6	5	sep	mon	90.9	126.5	686.5	7.0	21.3	42	2.2	0.0	0.0
	14	6	5	sep	wed	92.9	133.3	699.6	9.2	26.4	21	4.5	0.0	0.0
	15	6	5	sep	fri	93.3	141.2	713.9	13.9	22.9	44	5.4	0.0	0.0
	16	5	5	mar	sat	91.7	35.8	80.8	7.8	15.1	27	5.4	0.0	0.0
	17	8	5	oct	mon	84.9	32.8	664.2	3.0	16.7	47	4.9	0.0	0.0
	18	6	4	mar	wed	89.2	27.9	70.8	6.3	15.9	35	4.0	0.0	0.0
	19	6	4	apr	sat	86.3	27.4	97.1	5.1	9.3	44	4.5	0.0	0.0
	20	6	4	sep	tue	91.0	129.5	692.6	7.0	18.3	40	2.7	0.0	0.0
	21	5	4	sep	mon	91.8	78.5	724.3	9.2	19.1	38	2.7	0.0	0.0
	22	7	4	jun	sun	94.3	96.3	200.0	56.1	21.0	44	4.5	0.0	0.0
	23	7	4	aug	sat	90.2	110.9	537.4	6.2	19.5	43	5.8	0.0	0.0
	24	7	4	aug	sat	93.5	139.4	594.2	20.3	23.7	32	5.8	0.0	0.0
	25	7	4	aug	sun	91.4	142.4	601.4	10.6	16.3	60	5.4	0.0	0.0
	26	7	4	sep	fri	92.4	117.9	668.0	12.2	19.0	34	5.8	0.0	0.0
	27	7	4	sep	mon	90.9	126.5	686.5	7.0	19.4	48	1.3	0.0	0.0

28	6	3	sep	sat	93.4	145.4	721.4	8.1	30.2	24	2.7	0.0	0.0
29	6	3	sep	sun	93.5	149.3	728.6	8.1	22.8	39	3.6	0.0	0.0
30	6	3	sep	fri	94.3	85.1	692.3	15.9	25.4	24	3.6	0.0	0.0
31	6	3	sep	mon	88.6	91.8	709.9	7.1	11.2	78	7.6	0.0	0.0
32	6	3	sep	fri	88.6	69.7	706.8	5.8	20.6	37	1.8	0.0	0.0
33	6	3	sep	sun	91.7	75.6	718.3	7.8	17.7	39	3.6	0.0	0.0
34	6	3	sep	mon	91.8	78.5	724.3	9.2	21.2	32	2.7	0.0	0.0
35	6	3	sep	tue	90.3	80.7	730.2	6.3	18.2	62	4.5	0.0	0.0

36	6	3	oct	tue	90.6	35.4	669.1	6.7	21.7	24	4.5		0.0
	X	Y	month	day	FFMC	DMC	DC	ISI	temp	RH	wind	rain	output
37	7	4	oct	fri	90.0	41.5	682.6	8.7	11.3	60	5.4	0.0	0.0
38	7	3	oct	sat	90.6	43.7	686.9	6.7	17.8	27	4.0	0.0	0.0
39	4	4	mar	tue	88.1	25.7	67.6	3.8	14.1	43	2.7	0.0	0.0
40	4	4	jul	tue	79.5	60.6	366.7	1.5	23.3	37	3.1	0.0	0.0
41	4	4	aug	sat	90.2	96.9	624.2	8.9	18.4	42	6.7	0.0	0.0
42	4	4	aug	tue	94.8	108.3	647.1	17.0	16.6	54	5.4	0.0	0.0
43	4	4	sep	sat	92.5	88.0	698.6	7.1	19.6	48	2.7	0.0	0.0
44	4	4	sep	wed	90.1	82.9	735.7	6.2	12.9	74	4.9	0.0	0.0
45	5	6	sep	wed	94.3	85.1	692.3	15.9	25.9	24	4.0	0.0	0.0
46	5	6	sep	mon	90.9	126.5	686.5	7.0	14.7	70	3.6	0.0	0.0
47	6	6	jul	mon	94.2	62.3	442.9	11.0	23.0	36	3.1	0.0	0.0
48	4	4	mar	mon	87.2	23.9	64.7	4.1	11.8	35	1.8	0.0	0.0
49	4	4	mar	mon	87.6	52.2	103.8	5.0	11.0	46	5.8	0.0	0.0
50	4	4	sep	thu	92.9	137.0	706.4	9.2	20.8	17	1.3	0.0	0.0

													0.0
51	4	3	aug	sun	90.2	99.6	631.2	6.3	21.5	34	2.2	0.0	0.0
52	4	3	aug	wed	92.1	111.2	654.1	9.6	20.4	42	4.9	0.0	0.0
53	4	3	aug	wed	92.1	111.2	654.1	9.6	20.4	42	4.9	0.0	0.0
54	4	3	aug	thu	91.7	114.3	661.3	6.3	17.6	45	3.6	0.0	0.0
55	4	3	sep	thu	92.9	137.0	706.4	9.2	27.7	24	2.2	0.0	0.0
56	4	3	sep	tue	90.3	80.7	730.2	6.3	17.8	63	4.9	0.0	0.0
57	4	3	oct	sun	92.6	46.5	691.8	8.8	13.8	50	2.7	0.0	0.0
58	2	2	feb	mon	84.0	9.3	34.0	2.1	13.9	40	5.4	0.0	0.0
59	2	2	feb	fri	86.6	13.2	43.0	5.3	12.3	51	0.9	0.0	0.0
60	2	2	mar	sun	89.3	51.3	102.2	9.6	11.5	39	5.8	0.0	0.0
61	2	2	mar	sun	89.3	51.3	102.2	9.6	5.5	59	6.3	0.0	0.0
62	2	2	aug	thu	93.0	75.3	466.6	7.7	18.8	35	4.9	0.0	0.0
63	2	2	aug	sun	90.2	99.6	631.2	6.3	20.8	33	2.7	0.0	0.0
64	2	2	aug	mon	91.1	103.2	638.8	5.8	23.1	31	3.1	0.0	0.0
65	2	2	aug	thu	91.7	114.3	661.3	6.3	18.6	44	4.5	0.0	0.0
66	2	2	sep	fri	92.4	117.9	668.0	12.2	23.0	37	4.5	0.0	0.0
67	2	2	sep	fri	92.4	117.9	668.0	12.2	19.6	33	5.4	0.0	0.0
68	2	2	sep	fri	92.4	117.9	668.0	12.2	19.6	33	6.3	0.0	0.0
69	4	5	mar	fri	91.7	33.3	77.5	9.0	17.2	26	4.5	0.0	0.0
70	4	5	mar	fri	91.2	48.3	97.8	12.5	15.8	27	7.6	0.0	0.0
71	4	5	sep	fri	94.3	85.1	692.3	15.9	17.7	37	3.6	0.0	0.0
72	5	4	mar	fri	91.7	33.3	77.5	9.0	15.6	25	6.3	0.0	0.0
73	5	4	aug	tue	88.8	147.3	614.5	9.0	17.3	43	4.5	0.0	0.0
74	5	4	sep	fri	93.3	141.2	713.9	13.9	27.6	30	1.3		0.0
75	9	9	feb	thu	84.2	6.8	26.6	7.7	6.7	79	3.1	0.0	0.0
76	9	9	feb	fri	86.6	13.2	43.0	5.3	15.7	43	3.1	0.0	0.0
77	1	3	mar	mon	87.6	52.2	103.8	5.0	8.3	72	3.1	0.0	0.0
78	1	2	aug	fri	90.1	108.0	529.8	12.5	14.7	66	2.7	0.0	0.0
79	1	2	aug	tue	91.0	121.2	561.6	7.0	21.6	19	6.7	0.0	0.0
80	1	2	aug	sun	91.4	142.4	601.4	10.6	19.5	39	6.3	0.0	0.0

81	1	2	aug	sun	90.2	99.6	631.2	6.3	17.9	44	2.2	0.0	0.0
82	1	2	aug	tue	94.8	108.3	647.1	17.0	18.6	51	4.5	0.0	0.0
83	1	2	aug	wed	92.1	111.2	654.1	9.6	16.6	47	0.9	0.0	0.0
84	1	2	aug	thu	91.7	114.3	661.3	6.3	20.2	45	3.6	0.0	0.0
85	1	2	sep	thu	92.9	137.0	706.4	9.2	21.5	15	0.9	0.0	0.0
86	1	2	sep	thu	92.9	137.0	706.4	9.2	25.4	27	2.2	0.0	0.0
87	1	2	sep	thu	92.9	137.0	706.4	9.2	22.4	34	2.2	0.0	0.0
88	1	2	sep	sun	93.5	149.3	728.6	8.1	25.3	36	3.6	0.0	0.0
89	6	5	mar	sat	91.7	35.8	80.8	7.8	17.4	25	4.9	0.0	0.0
90	6	5	aug	sat	90.2	96.9	624.2	8.9	14.7	59	5.8	0.0	0.0
91	8	6	mar	fri	91.7	35.8	80.8	7.8	17.4	24	5.4	0.0	0.0
92	8	6	aug	sun	92.3	85.3	488.0	14.7	20.8	32	6.3	0.0	0.0
93	8	6	aug	sun	91.4	142.4	601.4	10.6	18.2	43	4.9	0.0	0.0
94	8	6	aug	mon	91.1	103.2	638.8	5.8	23.4	22	2.7	0.0	0.0
95	4	4	sep	sun	89.7	90.0	704.4	4.8	17.8	64	1.3	0.0	0.0
96	3	4	feb	sat	83.9	8.0	30.2	2.6	12.7	48	1.8	0.0	0.0
97	3	4	mar	sat	69.0	2.4	15.5	0.7	17.4	24	5.4	0.0	0.0
98	3	4	aug	sun	91.4	142.4	601.4	10.6	11.6	87	4.5	0.0	0.0
99	3	4	aug	sun	91.4	142.4	601.4	10.6	19.8	39	5.4	0.0	0.0
100	3	4	aug	sun	91.4	142.4	601.4	10.6	19.8	39	5.4	0.0	0.0
101	3	4	aug	tue	88.8	147.3	614.5	9.0	14.4	66	5.4	0.0	0.0
102	2	4	aug	tue	94.8	108.3	647.1	17.0	20.1	40	4.0	0.0	0.0
103	2	4	sep	sat	92.5	121.1	674.4	8.6	24.1	29	4.5	0.0	0.0
104	2	4	jan	sat	82.1	3.7	9.3	2.9	5.3	78	3.1	0.0	0.0
105	4	5	mar	fri	85.9	19.5	57.3	2.8	12.7	52	6.3	0.0	0.0

												0.0	
106	4	5	mar	thu	91.4	30.7	74.3	7.5	18.2	29	3.1	0.0	0.0
107	4	5	aug	sun	90.2	99.6	631.2	6.3	21.4	33	3.1	0.0	0.0
108	4	5	sep	sat	92.5	88.0	698.6	7.1	20.3	45	3.1	0.0	0.0
109	4	5	sep	mon	88.6	91.8	709.9	7.1	17.4	56	5.4	0.0	0.0
110	4	4	mar	fri	85.9	19.5	57.3	2.8	13.7	43	5.8		0.0

	X	X	Y	Y	day	day	FFMC	DCDC	ISI	ISI	RH	RH	wind	wind	rain
	month	month					FFMC	DMC	DCMC	temp	temp	rain	output	output	
111	3	4		mar		fri	91.7	33.3	77.5	9.0	18.8	18	4.5	0.0	0.0
112	3	4		sep		sun	89.7	90.0	704.4	4.8	22.8	39	3.6	0.0	0.0
113	3	4		sep		mon	91.8	78.5	724.3	9.2	18.9	35	2.7	0.0	0.0
114	3	4		mar		tue	88.1	25.7	67.6	3.8	15.8	27	7.6	0.0	0.0
115	3	5		mar		tue	88.1	25.7	67.6	3.8	15.5	27	6.3	0.0	0.0
116	3	4		mar		sat	91.7	35.8	80.8	7.8	11.6	30	6.3	0.0	0.0
117	3	4		mar		sat	91.7	35.8	80.8	7.8	15.2	27	4.9	0.0	0.0
118	3	4		mar		mon	90.1	39.7	86.6	6.2	10.6	30	4.0	0.0	0.0
119	3	4		aug		thu	93.0	75.3	466.6	7.7	19.6	36	3.1	0.0	0.0
120	3	4		aug		mon	91.5	145.4	608.2	10.7	10.3	74	2.2	0.0	0.0
121	3	4		aug		mon	91.5	145.4	608.2	10.7	17.1	43	5.4	0.0	0.0
122	3	4		sep		sun	92.4	124.1	680.7	8.5	22.5	42	5.4	0.0	0.0
123	3	4		sep		tue	84.4	73.4	671.9	3.2	17.9	45	3.1	0.0	0.0
124	3	4		sep		fri	94.3	85.1	692.3	15.9	19.8	50	5.4	0.0	0.0
125	3	4		oct		sun	92.6	46.5	691.8	8.8	20.6	24	5.4	0.0	0.0
126	3	5		mar		mon	87.6	52.2	103.8	5.0	9.0	49	2.2	0.0	0.0
127	3	5		sep		fri	93.5	149.3	728.6	8.1	17.2	43	3.1	0.0	0.0
128	3	5		oct		wed	91.4	37.9	673.8	5.2	15.9	46	3.6	0.0	0.0
129	2	5		oct		sun	92.6	46.5	691.8	8.8	15.4	35	0.9	0.0	0.0
130	4	6		feb		sat	68.2	21.5	87.2	0.8	15.4	40	2.7	0.0	0.0
131	4	6		mar		mon	87.2	23.9	64.7	4.1	14.0	39	3.1	0.0	0.0
132	4	6		mar		sun	89.3	51.3	102.2	9.6	10.6	46	4.9	0.0	0.0
133	4	6		sep		thu	93.7	80.9	685.2	17.9	17.6	42	3.1	0.0	0.0
134	3	5		mar		tue	88.1	25.7	67.6	3.8	14.9	38	2.7	0.0	0.0
135	3	5		aug		sat	93.5	139.4	594.2	20.3	17.6	52	5.8	0.0	0.0
136	3	6		sep		sun	92.4	124.1	680.7	8.5	17.2	58	1.3	0.0	0.0
137	3	6		sep		mon	90.9	126.5	686.5	7.0	15.6	66	3.1	0.0	0.0
138	9	9		jul		tue	85.8	48.3	313.4	3.9	18.0	42	2.7	0.0	1.0
139	1	4		sep		tue	91.0	129.5	692.6	7.0	21.7	38	2.2	0.0	1.0
140	2	5		sep		mon	90.9	126.5	686.5	7.0	21.9	39	1.8	0.0	1.0
141	1	2		aug		wed	95.5	99.9	513.3	13.2	23.3	31	4.5	0.0	1.0
142	8	6		aug		fri	90.1	108.0	529.8	12.5	21.2	51	8.9	0.0	1.0
143	1	2		jul		sat	90.0	51.3	296.3	8.7	16.6	53	5.4	0.0	1.0
144	2	5		aug		wed	95.5	99.9	513.3	13.2	23.8	32	5.4	0.0	1.0
145	6	5		aug		thu	95.2	131.7	578.8	10.4	27.4	22	4.0	0.0	1.0
146	5	4		mar		mon	90.1	39.7	86.6	6.2	13.2	40	5.4	0.0	1.0

												0.0	
147	8	3	sep	tue	84.4	73.4	671.9	3.2	24.2	28	3.6	0.0	1.0

148	2	aug	tue	94.8	108.3	647.1	17.0	17.4	43	6.7		
149	86	sep	thu	93.7	80.9	685.2	17.9	23.7	25	4.5	0.0	1.0
150	65	jun	fri	92.5	56.4	433.3	7.1	23.2	39	5.4	0.0	1.0
151	99	jul	sun	90.1	68.6	355.2	7.2	24.8	29	2.2	0.0	1.0
152	34	jul	sat	90.1	51.2	424.1	6.2	24.6	43	1.8	0.0	1.0
153	54	sep	fri	94.3	85.1	692.3	15.9	20.1	47	4.9	0.0	1.0
154	15	sep	sat	93.4	145.4	721.4	8.1	29.6	27	2.7	0.0	1.0
155	74	aug	sun	94.8	108.3	647.1	17.0	16.4	47	1.3	0.0	1.0
156	24	sep	sat	93.4	145.4	721.4	8.1	28.6	27	2.2	0.0	1.0
157	22	aug	wed	92.1	111.2	654.1	9.6	18.4	45	3.6	0.0	1.0
158	24	aug	wed	92.1	111.2	654.1	9.6	20.5	35	4.0	0.0	1.0
159	74	sep	fri	92.4	117.9	668.0	12.2	19.0	34	5.8	0.0	1.0
160	74	mar	mon	90.1	39.7	86.6	6.2	16.1	29	3.1	0.0	1.0
161	64	aug	thu	95.2	131.7	578.8	10.4	20.3	41	4.0	0.0	1.0
162	63	mar	sat	90.6	50.1	100.4	7.8	15.2	31	8.5	0.0	1.0
163	86	sep	sat	92.5	121.1	674.4	8.6	17.8	56	1.8	0.0	1.0
164	85	sep	sun	89.7	90.0	704.4	4.8	17.8	67	2.2	0.0	1.0
165	65	mar	thu	84.9	18.2	55.0	3.0	5.3	70	4.5	0.0	1.0
166	65	aug	wed	92.1	111.2	654.1	9.6	16.6	47	0.9	0.0	1.0
167	65	aug	wed	96.0	127.1	570.5	16.5	23.4	33	4.5	0.0	1.0
168	65	mar	fri	91.2	48.3	97.8	12.5	14.6	26	9.4	0.0	1.0
169	86	aug	thu	95.2	131.7	578.8	10.4	20.7	45	2.2	0.0	1.0
170	54	sep	wed	92.9	133.3	699.6	9.2	21.9	35	1.8	0.0	1.0
171	86	aug	wed	85.6	90.4	609.6	6.6	17.4	50	4.0	0.0	1.0

172	74	aug	sun	91.4	142.4	601.4	10.6	20.1	39	5.4	0.0	1.0
173	44	sep	mon	90.9	126.5	686.5	7.0	17.7	39	2.2	0.0	1.0
174	14	aug	sat	90.2	96.9	624.2	8.9	14.2	53	1.8	0.0	1.0
175	14	aug	sat	90.2	96.9	624.2	8.9	20.3	39	4.9	0.0	1.0
176	65	apr	thu	81.5	9.1	55.2	2.7	5.8	54	5.8	0.0	1.0
177	25	aug	sun	90.2	99.6	631.2	6.3	19.2	44	2.7	0.0	1.0
178	25	sep	wed	90.1	82.9	735.7	6.2	18.3	45	2.2	0.0	1.0
179	86	aug	tue	88.8	147.3	614.5	9.0	14.4	66	5.4	0.0	1.0
180	13	sep	sun	92.4	124.1	680.7	8.5	23.9	32	6.7	0.0	1.0
181	86	oct	mon	84.9	32.8	664.2	3.0	19.1	32	4.0	0.0	1.0
182	54	feb	sun	86.8	15.6	48.3	3.9	12.4	53	2.2	0.0	1.0
183	74	oct	mon	91.7	48.5	696.1	11.1	16.8	45	4.5	0.0	1.0
184	8	6	aug	fri	93.9	135.7	586.7	15.1	20.8	34	4.9	1.0

	X	X	Y	Y	month	month	DC	DC	ISI	ISI	RH	RH	wind	wind	rain
	day	day			FFMC	FFMC	DMC	DMC	temp	temp	rain		output	output	rain
185	2	5		sep	tue	91.0	129.5	692.6	7.0	17.6	46	3.1	0.0		1.0
186	8	6		mar	sun	89.2	51.2	102.2	9.6	11.5	39	5.8	0.0		1.0
187	1	5		sep	mon	90.9	126.5	686.5	7.0	21.0	42	2.2	0.0		1.0
188	6	4		mar	sat	90.8	41.9	89.4	7.9	13.3	42	0.9	0.0		1.0
189	7	4		mar	sun	90.7	44.0	92.4	5.5	11.5	60	4.0	0.0		1.0
190	6	5		mar	fri	91.2	48.3	97.8	12.5	11.7	33	4.0	0.0		1.0
191	2	5		aug	thu	95.2	131.7	578.8	10.4	24.2	28	2.7	0.0		1.0
192	2	2		aug	tue	94.8	108.3	647.1	17.0	24.6	22	4.5	0.0		1.0
193	4	5		sep	wed	92.9	133.3	699.6	9.2	24.3	25	4.0	0.0		1.0
194	2	2		aug	tue	94.8	108.3	647.1	17.0	24.6	22	4.5	0.0		1.0
195	2	5		aug	fri	93.9	135.7	586.7	15.1	23.5	36	5.4	0.0		1.0
196	6	5		apr	thu	81.5	9.1	55.2	2.7	5.8	54	5.8	0.0		1.0
197	4	5		sep	thu	92.9	137.0	706.4	9.2	21.5	15	0.9	0.0		1.0
198	3	4		sep	tue	91.0	129.5	692.6	7.0	13.9	59	6.3	0.0		1.0
199	2	4		sep	mon	63.5	70.8	665.3	0.8	22.6	38	3.6	0.0		1.0
200	1	5		sep	tue	91.0	129.5	692.6	7.0	21.6	33	2.2	0.0		1.0
201	6	5		mar	sun	90.1	37.6	83.7	7.2	12.4	54	3.6	0.0		1.0
202	7	4		feb	sun	83.9	8.7	32.1	2.1	8.8	68	2.2	0.0		1.0
203	8	6		oct	wed	91.4	37.9	673.8	5.2	20.2	37	2.7	0.0		1.0
204	5	6		mar	sat	90.6	50.1	100.4	7.8	15.1	64	4.0	0.0		1.0
205	4	5		sep	thu	92.9	137.0	706.4	9.2	22.1	34	1.8	0.0		1.0
206	2	2		aug	sat	93.5	139.4	594.2	20.3	22.9	31	7.2	0.0		1.0
207	7	5		sep	tue	91.0	129.5	692.6	7.0	20.7	37	2.2	0.0		1.0
208	6	5		sep	fri	92.4	117.9	668.0	12.2	19.6	33	6.3	0.0		1.0
209	8	3		sep	thu	93.7	80.9	685.2	17.9	23.2	26	4.9	0.0		1.0
210	4	4		oct	sat	90.6	43.7	686.9	6.7	18.4	25	3.1	0.0		1.0
211	7	4		aug	sat	93.5	139.4	594.2	20.3	5.1	96	5.8	0.0		1.0
212	7	4		sep	fri	94.3	85.1	692.3	15.9	20.1	47	4.9	0.0		1.0
213	7	3		mar	mon	87.6	52.2	103.8	5.0	11.0	46	5.8	0.0		1.0
214	4	4		mar	sat	91.7	35.8	80.8	7.8	17.0	27	4.9	0.0		1.0
215	4	4		mar	sat	91.7	35.8	80.8	7.8	17.0	27	4.9	0.0		1.0
216	4	4		sep	sun	92.4	124.1	680.7	8.5	16.9	60	1.3	0.0		1.0
217	1	3		sep	mon	88.6	91.8	709.9	7.1	12.4	73	6.3	0.0		1.0
218	4	5		sep	wed	92.9	133.3	699.6	9.2	19.4	19	1.3	0.0		1.0
219	6	5		mar	mon	90.1	39.7	86.6	6.2	15.2	27	3.1	0.0		1.0
220	8	6		aug	sun	90.2	99.6	631.2	6.3	16.2	59	3.1	0.0		1.0

221	3	4	sep	fri	93.3	141.2	713.9	13.9	18.6	49	3.6	0.0	1.0
222	3		mar	mon	87.6	52.2	103.8	5.0	11.0	46	5.8		
223	22		jul	fri	88.3	150.3	309.9	6.8	13.4	79	3.6	0.0	1.0
224	74		sep	wed	90.1	82.9	735.7	6.2	15.4	57	4.5	0.0	1.0
225	44		sep	sun	93.5	149.3	728.6	8.1	22.9	39	4.9	0.0	1.0
226	75		oct	mon	91.7	48.5	696.1	11.1	16.1	44	4.0	0.0	1.0
227	86		aug	sat	92.2	81.8	480.8	11.9	20.1	34	4.5	0.0	1.0
228	46		sep	sun	93.5	149.3	728.6	8.1	28.3	26	3.1	0.0	1.0
229	86		aug	sat	92.2	81.8	480.8	11.9	16.4	43	4.0	0.0	1.0
230	44		sep	wed	92.9	133.3	699.6	9.2	26.4	21	4.5	0.0	1.0
231	15		sep	sun	93.5	149.3	728.6	8.1	27.8	27	3.1	0.0	1.0
232	64		sep	tue	91.0	129.5	692.6	7.0	18.7	43	2.7	0.0	1.0
233	94		sep	tue	84.4	73.4	671.9	3.2	24.3	36	3.1	0.0	1.0
234	45		sep	sat	92.5	121.1	674.4	8.6	17.7	25	3.1	0.0	1.0
235	86		aug	sun	91.4	142.4	601.4	10.6	19.6	41	5.8	0.0	1.0
236	22		sep	sat	92.5	121.1	674.4	8.6	18.2	46	1.8	0.0	1.0
237	12		sep	tue	91.0	129.5	692.6	7.0	18.8	40	2.2	0.0	1.0
238	65		sep	sat	92.5	121.1	674.4	8.6	25.1	27	4.0	0.0	1.0
239	75		apr	sun	81.9	3.0	7.9	3.5	13.4	75	1.8	0.0	0.0
240	63		apr	wed	88.0	17.2	43.5	3.8	15.2	51	2.7	0.0	0.0
241	44		apr	fri	83.0	23.3	85.3	2.3	16.7	20	3.1	0.0	0.0
242	24		aug	sun	94.2	122.3	589.9	12.9	15.4	66	4.0	0.0	1.0
243	74		aug	sun	91.8	175.1	700.7	13.8	21.9	73	7.6	1.0	0.0
244	24		aug	sun	91.8	175.1	700.7	13.8	22.4	54	7.6	0.0	1.0
245	34		aug	sun	91.8	175.1	700.7	13.8	26.8	38	6.3	0.0	1.0
246	54		aug	sun	91.8	175.1	700.7	13.8	25.7	39	5.4	0.0	1.0
247	24		aug	wed	92.2	91.6	503.6	9.6	20.7	70	2.2	0.0	1.0
248	86		aug	wed	93.1	157.3	666.7	13.5	28.7	28	2.7	0.0	0.0
249	34		aug	wed	93.1	157.3	666.7	13.5	21.7	40	0.4	0.0	1.0
250	85		aug	wed	93.1	157.3	666.7	13.5	26.8	25	3.1	0.0	1.0
251	85		aug	wed	93.1	157.3	666.7	13.5	24.0	36	3.1	0.0	1.0
252	65		aug	wed	93.1	157.3	666.7	13.5	22.1	37	3.6	0.0	1.0
253	74		aug	thu	91.9	109.2	565.5	8.0	21.4	38	2.7	0.0	1.0
254	63		aug	thu	91.6	138.1	621.7	6.3	18.9	41	3.1	0.0	1.0

	X	Y	month	day	FFMC	DMC	DC	ISI	temp	RH	wind	rain	output
		6										0.0	1.0
255		25	aug	thu	87.5	77.0	694.8	5.0	22.3	46	4.0	0.0	0.0
256		86	aug	sat	94.2	117.2	581.1	11.0	23.9	41	2.2	0.0	1.0
257		43	aug	sat	94.2	117.2	581.1	11.0	21.4	44	2.7	0.0	1.0
258	3	4	aug	sat	91.8	170.9	692.3	13.7	20.6	59	0.9		0.0

	X	Y	month	day	FFMC	DMC	DC	ISI	temp	RH	wind	rain	output
259	7	4	aug	sat	91.8	170.9	692.3	13.7	23.7	40	1.8	0.0	1.0
260	2	4	aug	mon	93.6	97.9	542.0	14.4	28.3	32	4.0	0.0	1.0
261	3	4	aug	fri	91.6	112.4	573.0	8.9	11.2	84	7.6	0.0	1.0
262	2	4	aug	fri	91.6	112.4	573.0	8.9	21.4	42	3.1	0.0	1.0
263	6	3	aug	fri	91.1	141.1	629.1	7.1	19.3	39	3.6	0.0	1.0
264	4	4	aug	fri	94.3	167.6	684.4	13.0	21.8	53	3.1	0.0	1.0
265	4	4	aug	tue	93.7	102.2	550.3	14.6	22.1	54	7.6	0.0	1.0
266	6	5	aug	tue	94.3	131.7	607.1	22.7	19.4	55	4.0	0.0	1.0
267	2	2	aug	tue	92.1	152.6	658.2	14.3	23.7	24	3.1	0.0	0.0
268	3	4	aug	tue	92.1	152.6	658.2	14.3	21.0	32	3.1	0.0	0.0
269	4	4	aug	tue	92.1	152.6	658.2	14.3	19.1	53	2.7	0.0	1.0
270	2	2	aug	tue	92.1	152.6	658.2	14.3	21.8	56	3.1	0.0	1.0
271	8	6	aug	tue	92.1	152.6	658.2	14.3	20.1	58	4.5	0.0	1.0
272	2	5	aug	tue	92.1	152.6	658.2	14.3	20.2	47	4.0	0.0	1.0
273	4	6	dec	sun	84.4	27.2	353.5	6.8	4.8	57	8.5	0.0	1.0
274	8	6	dec	wed	84.0	27.8	354.6	5.3	5.1	61	8.0	0.0	1.0
275	4	6	dec	thu	84.6	26.4	352.0	2.0	5.1	61	4.9	0.0	1.0
276	4	4	dec	mon	85.4	25.4	349.7	2.6	4.6	21	8.5	0.0	1.0
277	3	4	dec	mon	85.4	25.4	349.7	2.6	4.6	21	8.5	0.0	1.0
278	4	4	dec	mon	85.4	25.4	349.7	2.6	4.6	21	8.5	0.0	1.0
279	4	4	dec	mon	85.4	25.4	349.7	2.6	4.6	21	8.5	0.0	1.0
280	4	6	dec	fri	84.7	26.7	352.6	4.1	2.2	59	4.9	0.0	1.0
281	6	5	dec	tue	85.4	25.4	349.7	2.6	5.1	24	8.5	0.0	1.0
282	6	3	feb	sun	84.9	27.5	353.5	3.4	4.2	51	4.0	0.0	0.0
283	3	4	feb	wed	86.9	6.6	18.7	3.2	8.8	35	3.1	0.0	1.0
284	5	4	feb	fri	85.2	4.9	15.8	6.3	7.5	46	8.0	0.0	1.0
285	2	5	jul	sun	93.9	169.7	411.8	12.3	23.4	40	6.3	0.0	0.0
286	7	6	jul	wed	91.2	183.1	437.7	12.5	12.6	90	7.6	0.2	0.0
287	7	4	jul	sat	91.6	104.2	474.9	9.0	22.1	49	2.7	0.0	0.0
288	7	4	jul	sat	91.6	104.2	474.9	9.0	24.2	32	1.8	0.0	0.0
289	7	4	jul	sat	91.6	104.2	474.9	9.0	24.3	30	1.8	0.0	0.0
290	2	5	jul	sat	91.6	104.2	474.9	9.0	18.7	53	1.8	0.0	0.0
291	9	4	jul	sat	91.6	104.2	474.9	9.0	25.3	39	0.9	0.0	1.0

	X	Y	month	day	FFMC	DMC	DC	ISI	temp	RH	wind	rain	output
		8										0.0	1.0
292	4	5	jul	fri	91.6	100.2	466.3	6.3	22.9	40	1.3	0.0	1.0
293	7	6	jul	tue	93.1	180.4	430.8	11.0	26.9	28	5.4	0.0	1.0
294	8	6	jul	tue	92.3	88.8	440.9	8.5	17.1	67	3.6	0.0	1.0
295	7	5	jun	sun	93.1	180.4	430.8	11.0	22.2	48	1.3	0.0	0.0
296		4	jun	sun	90.4	89.5	290.8	6.4	14.3	46	1.8		
297		8 6	jun	sun	90.4	89.5	290.8	6.4	15.4	45	2.2	0.0	0.0
298		8 6	jun	wed	91.2	147.8	377.2	12.7	19.6	43	4.9	0.0	0.0
299		6 5	jun	sat	53.4	71.0	233.8	0.4	10.6	90	2.7	0.0	0.0
300		6 5	jun	mon	90.4	93.3	298.1	7.5	20.7	25	4.9	0.0	0.0
301		6 5	jun	mon	90.4	93.3	298.1	7.5	19.1	39	5.4	0.0	1.0
302		3 6	jun	fri	91.1	94.1	232.1	7.1	19.2	38	4.5	0.0	0.0
303		3 6	jun	fri	91.1	94.1	232.1	7.1	19.2	38	4.5	0.0	0.0
304		6 5	may	sat	85.1	28.0	113.8	3.5	11.3	94	4.9	0.0	0.0
305		1 4	sep	sun	89.6	84.1	714.3	5.7	19.0	52	2.2	0.0	0.0
306		7 4	sep	sun	89.6	84.1	714.3	5.7	17.1	53	5.4	0.0	1.0
307		3 4	sep	sun	89.6	84.1	714.3	5.7	23.8	35	3.6	0.0	1.0
308		2 4	sep	sun	92.4	105.8	758.1	9.9	16.0	45	1.8	0.0	0.0
309		2 4	sep	sun	92.4	105.8	758.1	9.9	24.9	27	2.2	0.0	0.0
310		7 4	sep	sun	92.4	105.8	758.1	9.9	25.3	27	2.7	0.0	0.0
311		6 3	sep	sun	92.4	105.8	758.1	9.9	24.8	28	1.8	0.0	1.0
312		2 4	sep	sun	50.4	46.2	706.6	0.4	12.2	78	6.3	0.0	0.0
313		6 5	sep	wed	92.6	115.4	777.1	8.8	24.3	27	4.9	0.0	0.0
314		4 4	sep	wed	92.6	115.4	777.1	8.8	19.7	41	1.8	0.0	1.0
315		3 4	sep	wed	91.2	134.7	817.5	7.2	18.5	30	2.7	0.0	0.0
316		4 5	sep	thu	92.4	96.2	739.4	8.6	18.6	24	5.8	0.0	0.0
317		4 4	sep	thu	92.4	96.2	739.4	8.6	19.2	24	4.9	0.0	1.0
318		6 5	sep	thu	92.8	119.0	783.5	7.5	21.6	27	2.2	0.0	0.0
319		5 4	sep	thu	92.8	119.0	783.5	7.5	21.6	28	6.3	0.0	1.0
320		6 3	sep	thu	92.8	119.0	783.5	7.5	18.9	34	7.2	0.0	1.0
321		1 4	sep	thu	92.8	119.0	783.5	7.5	16.8	28	4.0	0.0	1.0
322		6 5	sep	thu	92.8	119.0	783.5	7.5	16.8	28	4.0	0.0	1.0
323		3 5	sep	thu	90.7	136.9	822.8	6.8	12.9	39	2.7	0.0	1.0
324		6 5	sep	thu	88.1	53.3	726.9	5.4	13.7	56	1.8	0.0	1.0
325		1 4	sep	sat	92.2	102.3	751.5	8.4	24.2	27	3.1	0.0	0.0

0.0

	X	Y	month	day	FFMC	DMC	DC	ISI	temp	RH	wind	rain	output
326	5	4	sep	sat	92.2	102.3	751.5	8.4	24.1	27	3.1	0.0	0.0
327	6	5	sep	sat	92.2	102.3	751.5	8.4	21.2	32	2.2	0.0	0.0
328	6	5	sep	sat	92.2	102.3	751.5	8.4	19.7	35	1.8	0.0	0.0
329	4	3	sep	sat	92.2	102.3	751.5	8.4	23.5	27	4.0	0.0	1.0
330	3	3	sep	sat	92.2	102.3	751.5	8.4	24.2	27	3.1	0.0	1.0
331	7	4	sep	sat	91.2	124.4	795.3	8.5	21.5	28	4.5	0.0	1.0
332	4	4	sep	sat	91.2	124.4	795.3	8.5	17.1	41	2.2		1.0
333	1	4	sep	mon	92.1	87.7	721.1	9.5	18.1	54	3.1	0.0	1.0
334	2	3	sep	mon	91.6	108.4	764.0	6.2	18.0	51	5.4	0.0	0.0
335	4	3	sep	mon	91.6	108.4	764.0	6.2	9.8	86	1.8	0.0	0.0
336	7	4	sep	mon	91.6	108.4	764.0	6.2	19.3	44	2.2	0.0	0.0
337	6	3	sep	mon	91.6	108.4	764.0	6.2	23.0	34	2.2	0.0	1.0
338	8	6	sep	mon	91.6	108.4	764.0	6.2	22.7	35	2.2	0.0	1.0
339	2	4	sep	mon	91.6	108.4	764.0	6.2	20.4	41	1.8	0.0	1.0
340	2	5	sep	mon	91.6	108.4	764.0	6.2	19.3	44	2.2	0.0	1.0
341	8	6	sep	mon	91.9	111.7	770.3	6.5	15.7	51	2.2	0.0	0.0
342	6	3	sep	mon	91.5	130.1	807.1	7.5	20.6	37	1.8	0.0	0.0
343	8	6	sep	mon	91.5	130.1	807.1	7.5	15.9	51	4.5	0.0	1.0
344	6	3	sep	mon	91.5	130.1	807.1	7.5	12.2	66	4.9	0.0	1.0
345	2	2	sep	mon	91.5	130.1	807.1	7.5	16.8	43	3.1	0.0	1.0
346	1	4	sep	mon	91.5	130.1	807.1	7.5	21.3	35	2.2	0.0	1.0
347	5	4	sep	fri	92.1	99.0	745.3	9.6	10.1	75	3.6	0.0	0.0
348	3	4	sep	fri	92.1	99.0	745.3	9.6	17.4	57	4.5	0.0	0.0
349	5	4	sep	fri	92.1	99.0	745.3	9.6	12.8	64	3.6	0.0	1.0
350	5	4	sep	fri	92.1	99.0	745.3	9.6	10.1	75	3.6	0.0	1.0
351	4	4	sep	fri	92.1	99.0	745.3	9.6	15.4	53	6.3	0.0	1.0
352	7	4	sep	fri	92.1	99.0	745.3	9.6	20.6	43	3.6	0.0	1.0

	X	Y	month	day	FFMC	DMC	DC	ISI	temp	RH	wind	rain	output
	10											0.0	1.0
353	7	4	sep	fri	92.1	99.0	745.3	9.6	19.8	47	2.7	0.0	1.0
354	7	4	sep	fri	92.1	99.0	745.3	9.6	18.7	50	2.2	0.0	1.0
355	4	4	sep	fri	92.1	99.0	745.3	9.6	20.8	35	4.9	0.0	1.0
356	4	4	sep	fri	92.1	99.0	745.3	9.6	20.8	35	4.9	0.0	1.0
357	6	3	sep	fri	92.5	122.0	789.7	10.2	15.9	55	3.6	0.0	0.0
358	6	3	sep	fri	92.5	122.0	789.7	10.2	19.7	39	2.7	0.0	0.0
359	1	4	sep	fri	92.5	122.0	789.7	10.2	21.1	39	2.2	0.0	1.0
360	6	5	sep	fri	92.5	122.0	789.7	10.2	18.4	42	2.2	0.0	1.0
361	4	3	sep	fri	92.5	122.0	789.7	10.2	17.3	45	4.0	0.0	1.0
362	7	4	sep	fri	88.2	55.2	732.3	11.6	15.2	64	3.1	0.0	1.0
363	4	3	sep	tue	91.9	111.7	770.3	6.5	15.9	53	2.2	0.0	1.0
364	6	5	sep	tue	91.9	111.7	770.3	6.5	21.1	35	2.7	0.0	1.0
365	6	5	sep	tue	91.9	111.7	770.3	6.5	19.6	45	3.1	0.0	1.0
366	4	5	sep	tue	91.1	132.3	812.1	12.5	15.9	38	5.4	0.0	1.0
367	4	5	sep	tue	91.1	132.3	812.1	12.5	16.4	27	3.6	0.0	0.0
368	6	5	sep	sat	91.2	94.3	744.4	8.4	16.8	47	4.9	0.0	1.0
369	4	5	sep	sun	91.0	276.3	825.1	7.1	13.8	77	7.6	0.0	0.0

X	Y		day	FFMC		ISI		output									
X	Y	month	month	day	FFMC	DMC	DMC	DCDC	ISI	temp	temp	RHRH	wind	wind	rain	rain	output

370	7	4	sep	sun	91.0	276.3	825.1	7.1	13.8	77	7.6	0.0	1.0
371	3	4	jul	wed	91.9	133.6	520.5	8.0	14.2	58	4.0	0.0	0.0
372	4	5	aug	sun	92.0	203.2	664.5	8.1	10.4	75	0.9	0.0	0.0
373	5	4	aug	thu	94.8	222.4	698.6	13.9	20.3	42	2.7	0.0	0.0
374	6	5	sep	fri	90.3	290.0	855.3	7.4	10.3	78	4.0	0.0	1.0
375	6	5	sep	sat	91.2	94.3	744.4	8.4	15.4	57	4.9	0.0	1.0
376	8	6	aug	mon	92.1	207.0	672.6	8.2	21.1	54	2.2	0.0	0.0
377	2	2	aug	sat	93.7	231.1	715.1	8.4	21.9	42	2.2	0.0	1.0
378	6	5	mar	thu	90.9	18.9	30.6	8.0	8.7	51	5.8	0.0	0.0
379	4	5	jan	sun	18.7	1.1	171.4	0.0	5.2	100	0.9	0.0	0.0
380	5	4	jul	wed	93.7	101.3	458.8	11.9	19.3	39	7.2	0.0	1.0
381	8	6	aug	thu	90.7	194.1	643.0	6.8	16.2	63	2.7	0.0	1.0
382	8	6	aug	wed	95.2	217.7	690.0	18.0	28.2	29	1.8	0.0	1.0
383	9	6	aug	thu	91.6	248.4	753.8	6.3	20.5	58	2.7	0.0	1.0
384	8	4	aug	sat	91.6	273.8	819.1	7.7	21.3	44	4.5	0.0	1.0
385	2	4	aug	sun	91.6	181.3	613.0	7.6	20.9	50	2.2	0.0	1.0
386	3	4	sep	sun	90.5	96.7	750.5	11.4	20.6	55	5.4	0.0	1.0
387	5	5	mar	thu	90.9	18.9	30.6	8.0	11.6	48	5.4	0.0	0.0
388	6	4	aug	fri	94.8	227.0	706.7	12.0	23.3	34	3.1	0.0	1.0
389	7	4	aug	fri	94.8	227.0	706.7	12.0	23.3	34	3.1	0.0	0.0
390	7	4	feb	mon	84.7	9.5	58.3	4.1	7.5	71	6.3	0.0	1.0
391	8	6	sep	fri	91.1	91.3	738.1	7.2	20.7	46	2.7	0.0	1.0
392	1	3	sep	sun	91.0	276.3	825.1	7.1	21.9	43	4.0	0.0	1.0
393	2	4	mar	tue	93.4	15.0	25.6	11.4	15.2	19	7.6	0.0	0.0
394	6	5	feb	mon	84.1	4.6	46.7	2.2	5.3	68	1.8	0.0	0.0
395	4	5	feb	sun	85.0	9.0	56.9	3.5	10.1	62	1.8	0.0	1.0
396	4	3	sep	sun	90.5	96.7	750.5	11.4	20.4	55	4.9	0.0	1.0
397	5	6	aug	sun	91.6	181.3	613.0	7.6	24.3	33	3.6	0.0	1.0
398	1	2	aug	sat	93.7	231.1	715.1	8.4	25.9	32	3.1	0.0	0.0

399	9	5	jun	wed	93.3	49.5	297.7	14.0	28.0	34	4.5	0.0	0.0
400	9	5	jun	wed	93.3	49.5	297.7	14.0	28.0	34	4.5	0.0	1.0
401		34	sep	thu	91.1	88.2	731.7	8.3	22.8	46	4.0	0.0	1.0
402	9	9	aug	fri	94.8	227.0	706.7	12.0	25.0	36	4.0	0.0	0.0
403	8	6	aug	thu	90.7	194.1	643.0	6.8	21.3	41	3.6	0.0	0.0
404	2	4	sep	wed	87.9	84.8	725.1	3.7	21.8	34	2.2	0.0	1.0
405		22	aug	tue	94.6	212.1	680.9	9.5	27.9	27	2.2	0.0	0.0

406 6 5 sep sat 87.1 291.3 860.6 4.0 17.0 67 4.9 0.0 1.0

407	4	5	feb	sat	84.7	8.2	55.0	2.9	14.2	46	4.0	0.0	0.0
408	4	3	sep	fri	90.3	290.0	855.3	7.4	19.9	44	3.1	0.0	1.0
409	1	4	jul	tue	92.3	96.2	450.2	12.1	23.4	31	5.4	0.0	0.0
410	6	3	feb	fri	84.1	7.3	52.8	2.7	14.7	42	2.7	0.0	0.0
411	7	4	feb	fri	84.6	3.2	43.6	3.3	8.2	53	9.4	0.0	1.0
412	9	4	jul	mon	92.3	92.1	442.1	9.8	22.8	27	4.5	0.0	1.0
413	7	5	aug	sat	93.7	231.1	715.1	8.4	26.4	33	3.6	0.0	0.0
414	5	4	aug	sun	93.6	235.1	723.1	10.1	24.1	50	4.0	0.0	0.0
415	8	6	aug	thu	94.8	222.4	698.6	13.9	27.5	27	4.9	0.0	1.0
416	6	3	jul	tue	92.7	164.1	575.8	8.9	26.3	39	3.1	0.0	1.0

417	6	5	mar	wed	93.4	17.3	28.3	9.9	13.8	24	5.8	0.0	0.0
418	2	4	aug	sun	92.0	203.2	664.5	8.1	24.9	42	5.4	0.0	1.0
419	2	5	aug	sun	91.6	181.3	613.0	7.6	24.8	36	4.0	0.0	1.0
420	8	8	aug	wed	91.7	191.4	635.9	7.8	26.2	36	4.5	0.0	1.0
421	2	4	aug	wed	95.2	217.7	690.0	18.0	30.8	19	4.5	0.0	0.0
422	8	6	jul	sun	88.9	263.1	795.9	5.2	29.3	27	3.6	0.0	1.0
423	1	3	sep	sat	91.2	94.3	744.4	8.4	22.3	48	4.0	0.0	1.0
424	8	6	aug	sat	93.7	231.1	715.1	8.4	26.9	31	3.6	0.0	1.0
425	2	2	aug	thu	91.6	248.4	753.8	6.3	20.4	56	2.2	0.0	0.0
426	8	6	aug	thu	91.6	248.4	753.8	6.3	20.4	56	2.2	0.0	0.0
427	2	4	aug	mon	92.1	207.0	672.6	8.2	27.9	33	2.2	0.0	1.0
428	1	3	aug	thu	94.8	222.4	698.6	13.9	26.2	34	5.8	0.0	0.0
429	3	4	aug	sun	91.6	181.3	613.0	7.6	24.6	44	4.0	0.0	1.0
430	7	4	sep	thu	89.7	287.2	849.3	6.8	19.4	45	3.6	0.0	0.0
431	1	3	aug	sat	92.1	178.0	605.3	9.6	23.3	40	4.0	0.0	1.0
432	8	6	aug	thu	94.8	222.4	698.6	13.9	23.9	38	6.7	0.0	0.0
433	2	4	aug	sun	93.6	235.1	723.1	10.1	20.9	66	4.9	0.0	1.0
434	1	4	aug	fri	90.6	269.8	811.2	5.5	22.2	45	3.6	0.0	0.0
435	2	5	jul	sat	90.8	84.7	376.6	5.6	23.8	51	1.8	0.0	0.0
436	8	6	aug	mon	92.1	207.0	672.6	8.2	26.8	35	1.3	0.0	1.0
437	8	6	aug	sat	89.4	253.6	768.4	9.7	14.2	73	2.7	0.0	0.0
438	2	5	aug	sat	93.7	231.1	715.1	8.4	23.6	53	4.0	0.0	1.0
439	1	3	sep	fri	91.1	91.3	738.1	7.2	19.1	46	2.2	0.0	1.0
440	5	4	sep	fri	90.3	290.0	855.3	7.4	16.2	58	3.6	0.0	0.0
441	8	6	aug	mon	92.1	207.0	672.6	8.2	25.5	29	1.8	0.0	1.0

442	6	5	apr	mon	87.9	24.9	41.6	3.7	10.9	64	3.1	0.0	1.0
443	1	2	jul	fri	90.7	80.9	368.3	16.8	14.8	78	8.0	0.0	0.0

	X	X	Y	Y	day	day	FFMC	DCDC	ISI	ISI	RHRH	wind	wind	rain
	month	month			FFMC	DMC	DMC		temp	temp	rain	output	output	
444	2	5		sep	fri	90.3	290.0	855.3	7.4	16.2	58	3.6	0.0	1.0
445	5	5		aug	sun	94.0	47.9	100.7	10.7	17.3	80	4.5	0.0	0.0
446	6	5		aug	sun	92.0	203.2	664.5	8.1	19.1	70	2.2	0.0	0.0
447	3	4		mar	wed	93.4	17.3	28.3	9.9	8.9	35	8.0	0.0	0.0
448	7	4		sep	wed	89.7	284.9	844.0	10.1	10.5	77	4.0	0.0	0.0
449	7	4		aug	sun	91.6	181.3	613.0	7.6	19.3	61	4.9	0.0	0.0
450	4	5		aug	wed	95.2	217.7	690.0	18.0	23.4	49	5.4	0.0	1.0
451	1	4		aug	fri	90.5	196.8	649.9	16.3	11.8	88	4.9	0.0	1.0
452	7	4		aug	mon	91.5	238.2	730.6	7.5	17.7	65	4.0	0.0	0.0
453	4	5		aug	thu	89.4	266.2	803.3	5.6	17.4	54	3.1	0.0	0.0
454	3	4		aug	thu	91.6	248.4	753.8	6.3	16.8	56	3.1	0.0	0.0
455	3	4		jul	mon	94.6	160.0	567.2	16.7	17.9	48	2.7	0.0	0.0
456	2	4		aug	thu	91.6	248.4	753.8	6.3	16.6	59	2.7	0.0	0.0
457	1	4		aug	wed	91.7	191.4	635.9	7.8	19.9	50	4.0	0.0	1.0
458	8	6		aug	sat	93.7	231.1	715.1	8.4	18.9	64	4.9	0.0	1.0
459	7	4		aug	sat	91.6	273.8	819.1	7.7	15.5	72	8.0	0.0	1.0
460	2	5		aug	sat	93.7	231.1	715.1	8.4	18.9	64	4.9	0.0	0.0
461	8	6		aug	sat	93.7	231.1	715.1	8.4	18.9	64	4.9	0.0	0.0
462	1	4		sep	sun	91.0	276.3	825.1	7.1	14.5	76	7.6	0.0	1.0
463	6	5		feb	tue	75.1	4.4	16.2	1.9	4.6	82	6.3	0.0	1.0
464	6	4		feb	tue	75.1	4.4	16.2	1.9	5.1	77	5.4	0.0	1.0
465	2	2		feb	sat	79.5	3.6	15.3	1.8	4.6	59	0.9	0.0	1.0
466	6	5		mar	mon	87.2	15.1	36.9	7.1	10.2	45	5.8	0.0	1.0
467	3	4		mar	wed	90.2	18.5	41.1	7.3	11.2	41	5.4	0.0	1.0
468	6	5		mar	thu	91.3	20.6	43.5	8.5	13.3	27	3.6	0.0	1.0
469	6	3		apr	sun	91.0	14.6	25.6	12.3	13.7	33	9.4	0.0	1.0
470	5	4		apr	sun	91.0	14.6	25.6	12.3	17.6	27	5.8	0.0	0.0
471	4	3		may	fri	89.6	25.4	73.7	5.7	18.0	40	4.0	0.0	1.0
472	8	3		jun	mon	88.2	96.2	229.0	4.7	14.3	79	4.0	0.0	1.0
473	9	4		jun	sat	90.5	61.1	252.6	9.4	24.5	50	3.1	0.0	1.0
474	4	3		jun	thu	93.0	103.8	316.7	10.8	26.4	35	2.7	0.0	1.0
475	2	5		jun	thu	93.7	121.7	350.2	18.0	22.7	40	9.4	0.0	1.0
476	4	3		jul	thu	93.5	85.3	395.0	9.9	27.2	28	1.3	0.0	1.0
477	4	3		jul	sun	93.7	101.3	423.4	14.7	26.1	45	4.0	0.0	1.0
478	7	4		jul	sun	93.7	101.3	423.4	14.7	18.2	82	4.5	0.0	1.0

479	7	4	jul	mon	89.2	103.9	431.6	6.4	22.6	57	4.9	0.0	1.0
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480	9	9	jul	thu	93.2	114.4	560.0	9.5	30.2	25	4.5	0.0	1.0
X Y month			day		FFMC	DMC	DC	ISI temp		RH wind rain output			

481	4	3	jul	thu	93.2	114.4	560.0	9.5	30.2	22	4.9	0.0	0.0
482	3	4	aug	sun	94.9	130.3	587.1	14.1	23.4	40	5.8	0.0	1.0
483	8	6	aug	sun	94.9	130.3	587.1	14.1	31.0	27	5.4	0.0	0.0
484	2	5	aug	sun	94.9	130.3	587.1	14.1	33.1	25	4.0	0.0	1.0
485	2	4	aug	mon	95.0	135.5	596.3	21.3	30.6	28	3.6	0.0	1.0
486	5	4	aug	tue	95.1	141.3	605.8	17.7	24.1	43	6.3	0.0	1.0
487	5	4	aug	tue	95.1	141.3	605.8	17.7	26.4	34	3.6	0.0	1.0
488	4	4	aug	tue	95.1	141.3	605.8	17.7	19.4	71	7.6	0.0	1.0
489	4	4	aug	wed	95.1	141.3	605.8	17.7	20.6	58	1.3	0.0	0.0
490	4	4	aug	wed	95.1	141.3	605.8	17.7	28.7	33	4.0	0.0	0.0
491	4	4	aug	thu	95.8	152.0	624.1	13.8	32.4	21	4.5	0.0	0.0
492	1	3	aug	fri	95.9	158.0	633.6	11.3	32.4	27	2.2	0.0	0.0
493	1	3	aug	fri	95.9	158.0	633.6	11.3	27.5	29	4.5	0.0	1.0
494	6	6	aug	sat	96.0	164.0	643.0	14.0	30.8	30	4.9	0.0	1.0
495	6	6	aug	mon	96.2	175.5	661.8	16.8	23.9	42	2.2	0.0	0.0
496	4	5	aug	mon	96.2	175.5	661.8	16.8	32.6	26	3.1	0.0	1.0
497	3	4	aug	tue	96.1	181.1	671.2	14.3	32.3	27	2.2	0.0	1.0
498	6	5	aug	tue	96.1	181.1	671.2	14.3	33.3	26	2.7	0.0	1.0
499	7	5	aug	tue	96.1	181.1	671.2	14.3	27.3	63	4.9	6.4	1.0
500	8	6	aug	tue	96.1	181.1	671.2	14.3	21.6	65	4.9	0.8	0.0
501	7	5	aug	tue	96.1	181.1	671.2	14.3	21.6	65	4.9	0.8	0.0
502	4	4	aug	tue	96.1	181.1	671.2	14.3	20.7	69	4.9	0.4	0.0
503	2	4	aug	wed	94.5	139.4	689.1	20.0	29.2	30	4.9	0.0	1.0
504	4	3	aug	wed	94.5	139.4	689.1	20.0	28.9	29	4.9	0.0	1.0
505	1	2	aug	thu	91.0	163.2	744.4	10.1	26.7	35	1.8	0.0	1.0
506	1	2	aug	fri	91.0	166.9	752.6	7.1	18.5	73	8.5	0.0	0.0
507	2	4	aug	fri	91.0	166.9	752.6	7.1	25.9	41	3.6	0.0	0.0
508	1	2	aug	fri	91.0	166.9	752.6	7.1	25.9	41	3.6	0.0	0.0

509	5	4	aug	fri	91.0	166.9	752.6	7.1	21.1	71	7.6	1.4	1.0
510	6	5	aug	fri	91.0	166.9	752.6	7.1	18.2	62	5.4	0.0	1.0
511	8	6	aug	sun	81.6	56.7	665.6	1.9	27.8	35	2.7	0.0	0.0
512	4	3	aug	sun	81.6	56.7	665.6	1.9	27.8	32	2.7	0.0	1.0
513	2	4	aug	sun	81.6	56.7	665.6	1.9	21.9	71	5.8	0.0	1.0
514	7	4	aug	sun	81.6	56.7	665.6	1.9	21.2	70	6.7	0.0	1.0
515	1	4	aug	sat	94.4	146.0	614.7	11.3	25.6	42	4.0	0.0	0.0

516 6 3 nov tue 79.5 3.0 106.7 1.1 11.8 31 4.5 0.0 0.0

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