

Project Development Phase
SPRINT 1

Date	16.11.2022
Team ID	PNT2022TMID20837
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\badari\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 FPMC
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
516	6	3	nov	tue	79.5	3.0	106.7			1.1	11.8	

31 4.5 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  FPMC   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

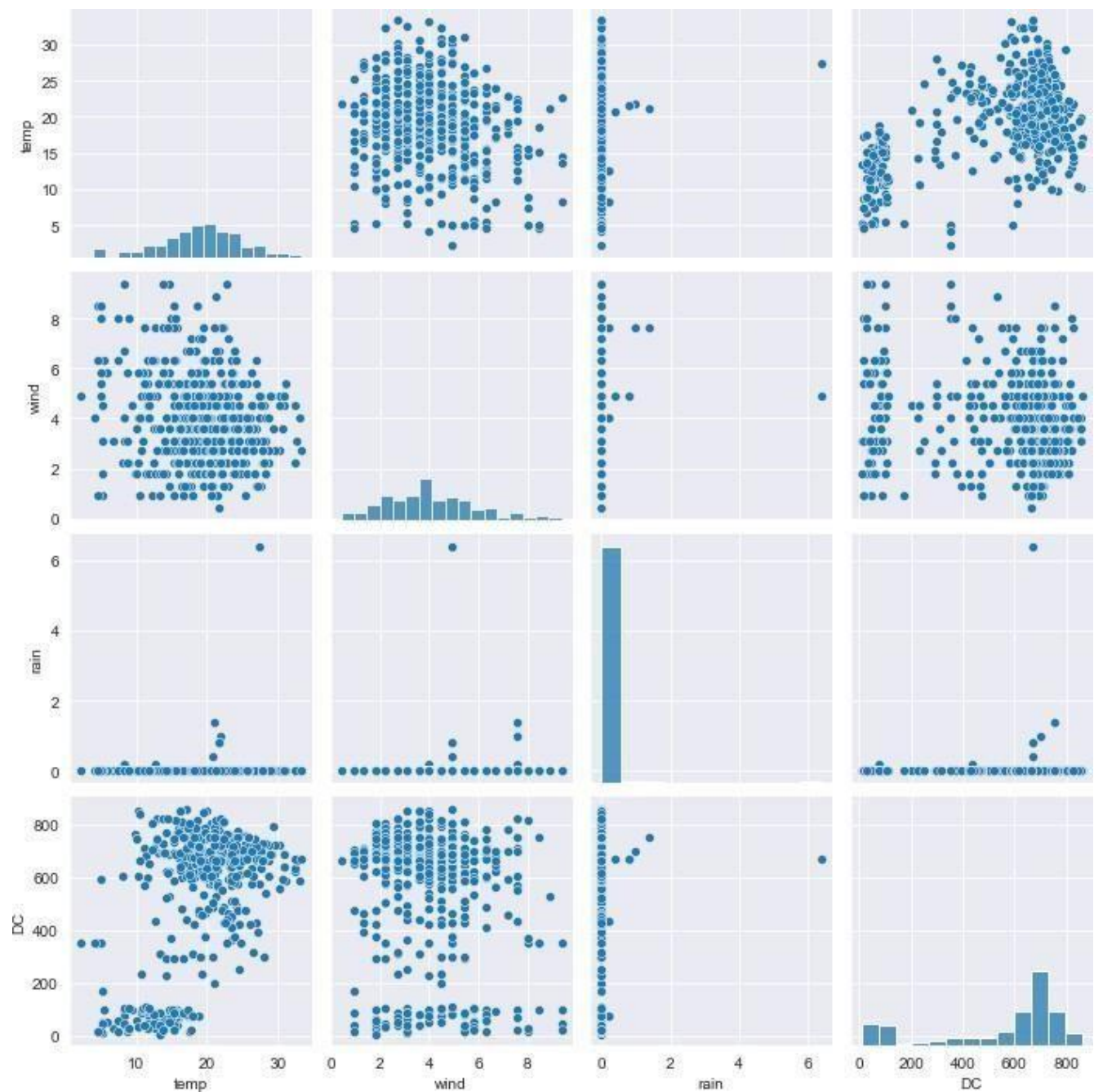
In [15]: numerical_feature = fires.describe(include=["int", "float"]).columns

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()
```

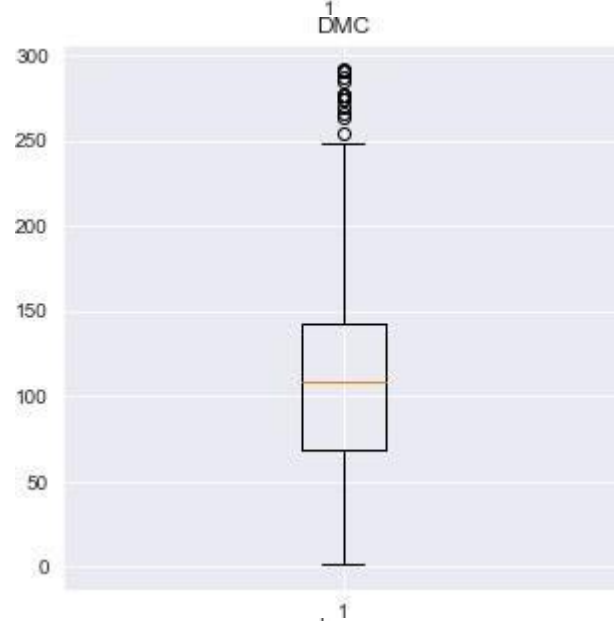
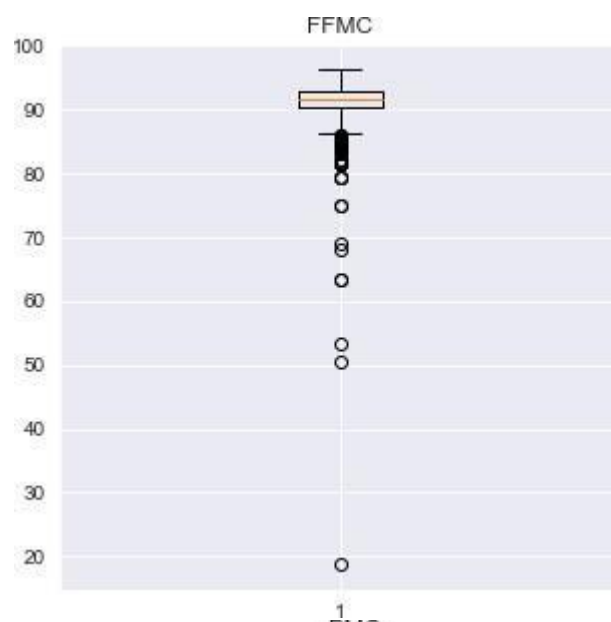
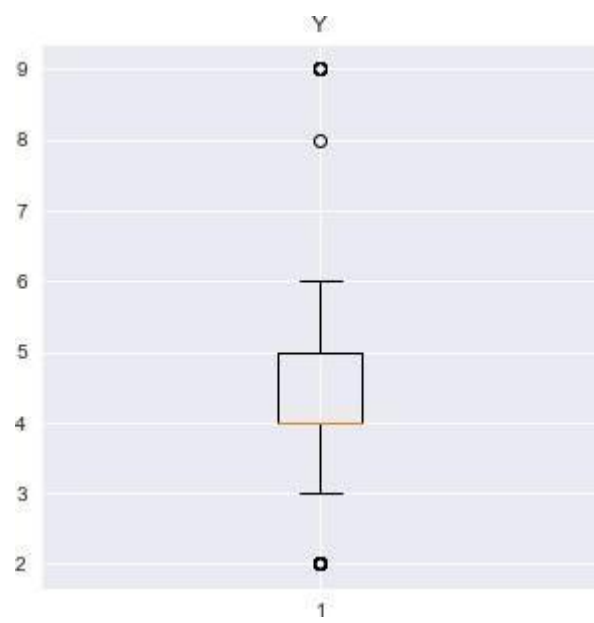
['X', 'Y', 'FFMC', 'DMC', 'DC', 'ISI', 'temp', 'RH', 'wind', 'rain', 'output']

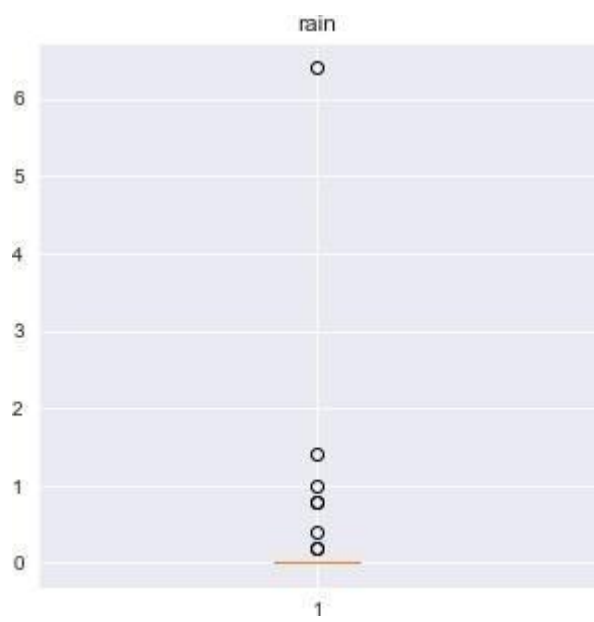
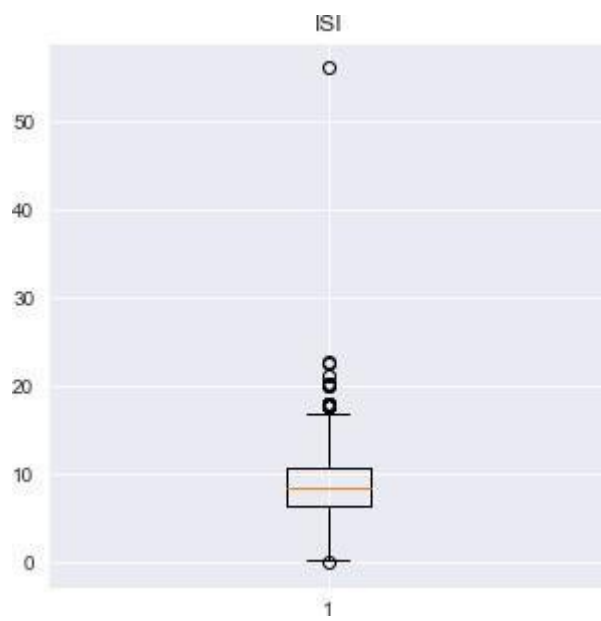
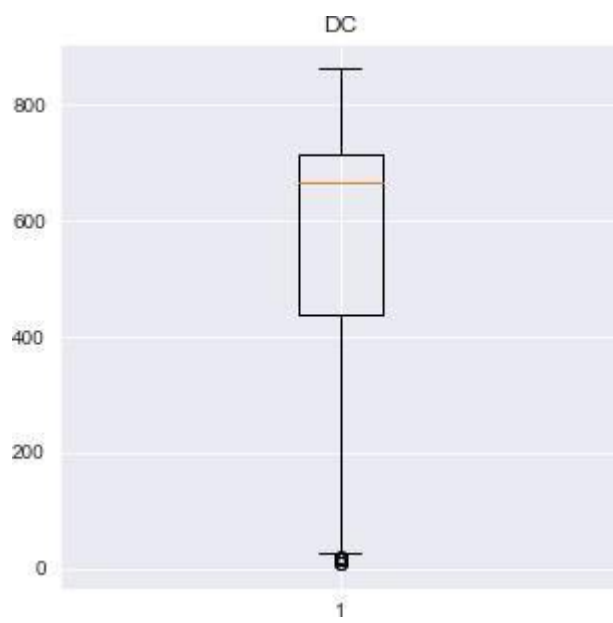
In [16]:

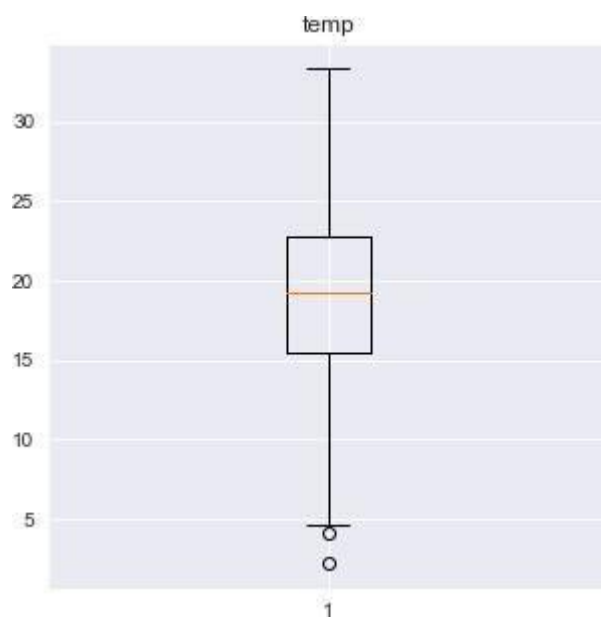
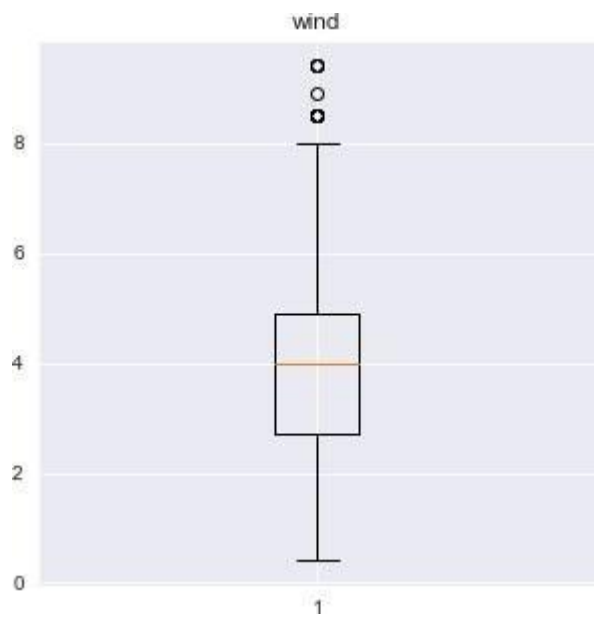
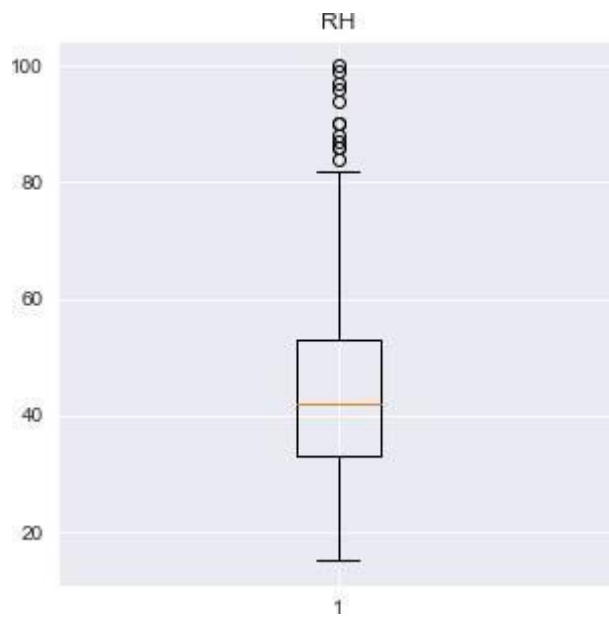


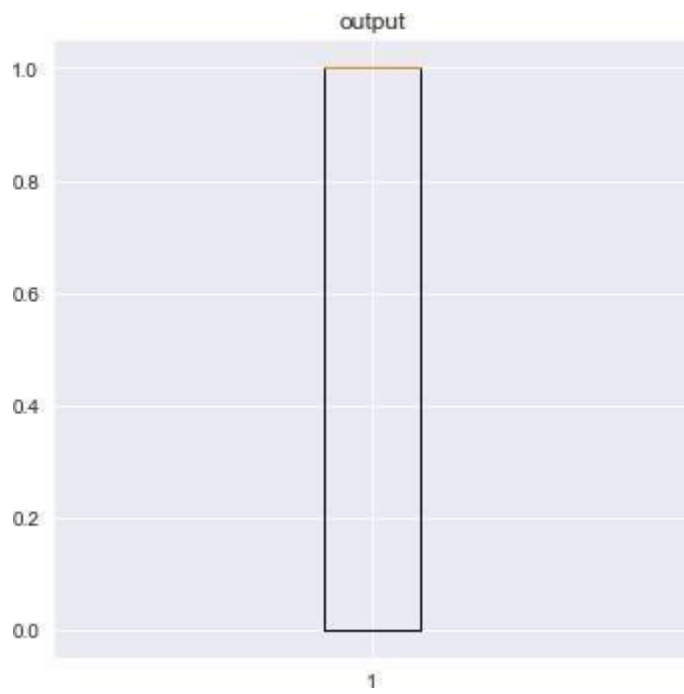
```
In [17]: for idx, col in enumerate(numerical_feature, 1):
plt.figure(figsize=(5,5))

# 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)
```



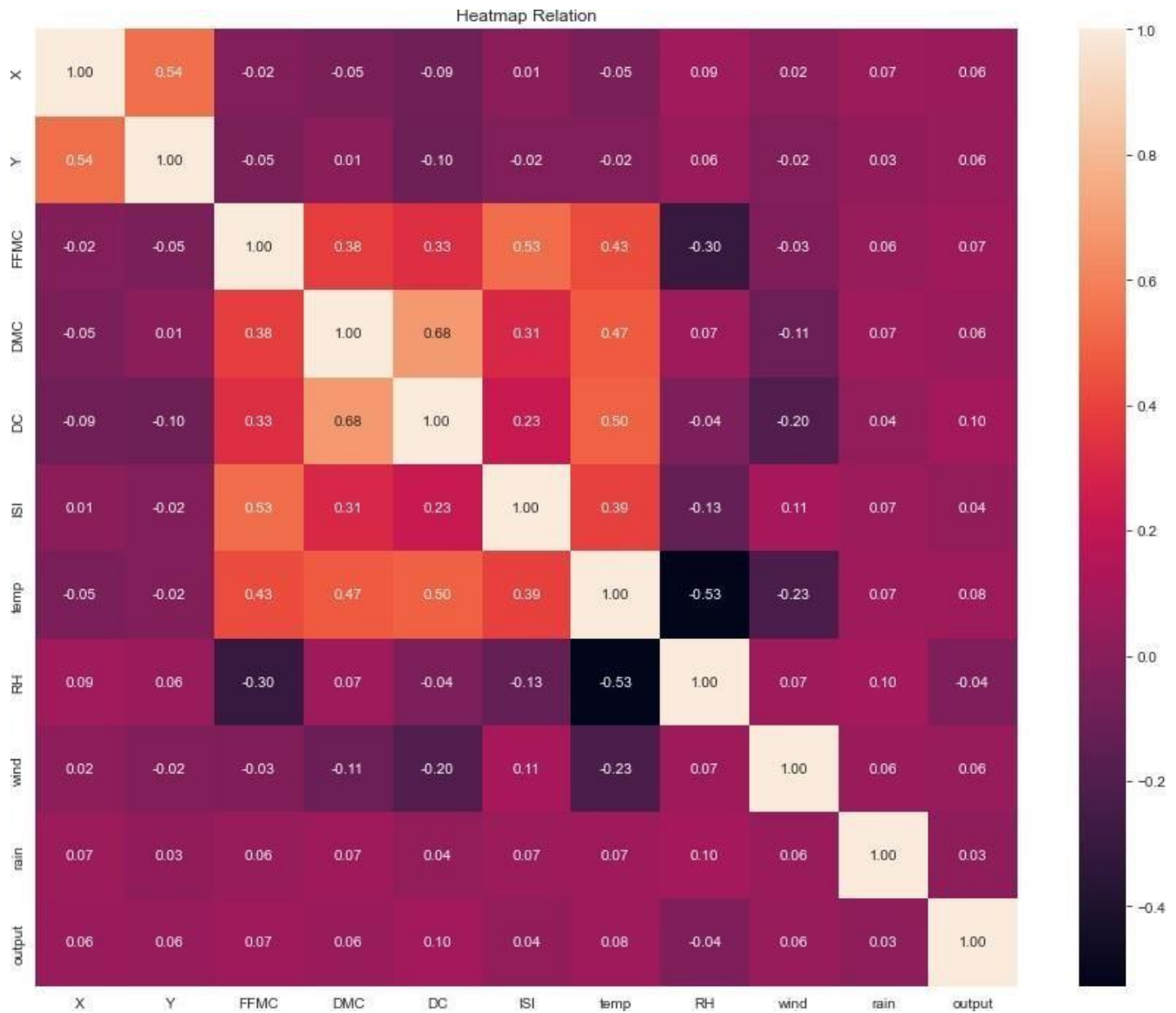






In [18]:

```
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
```

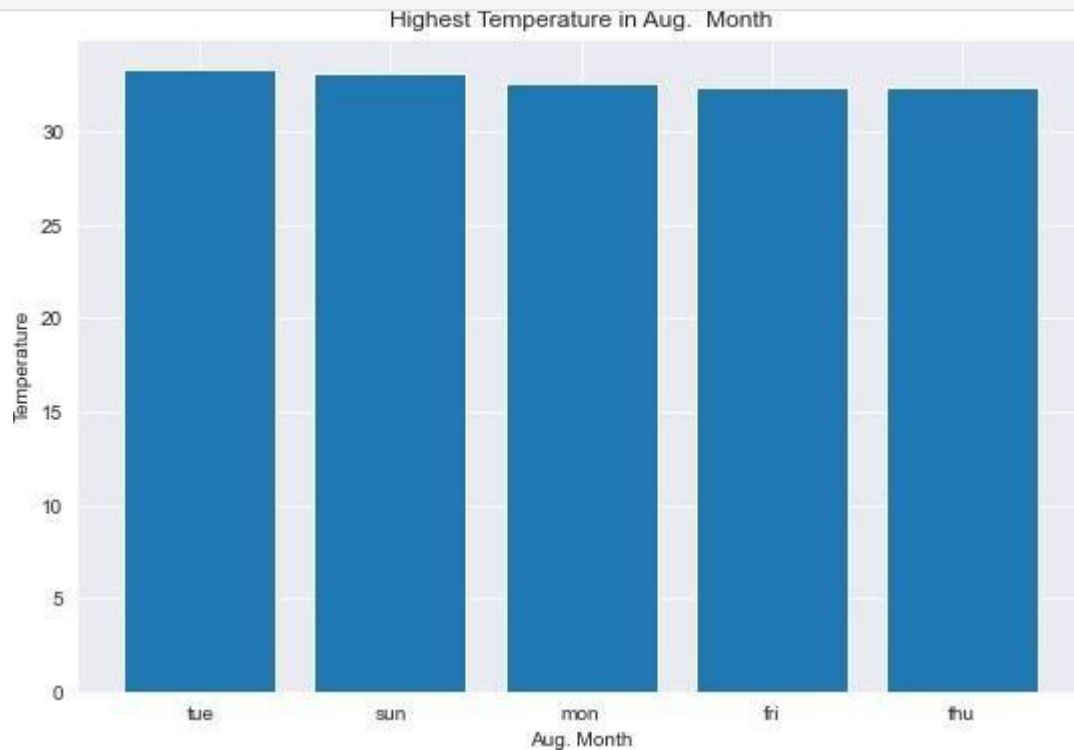
```
Out[19]:
```

	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'])

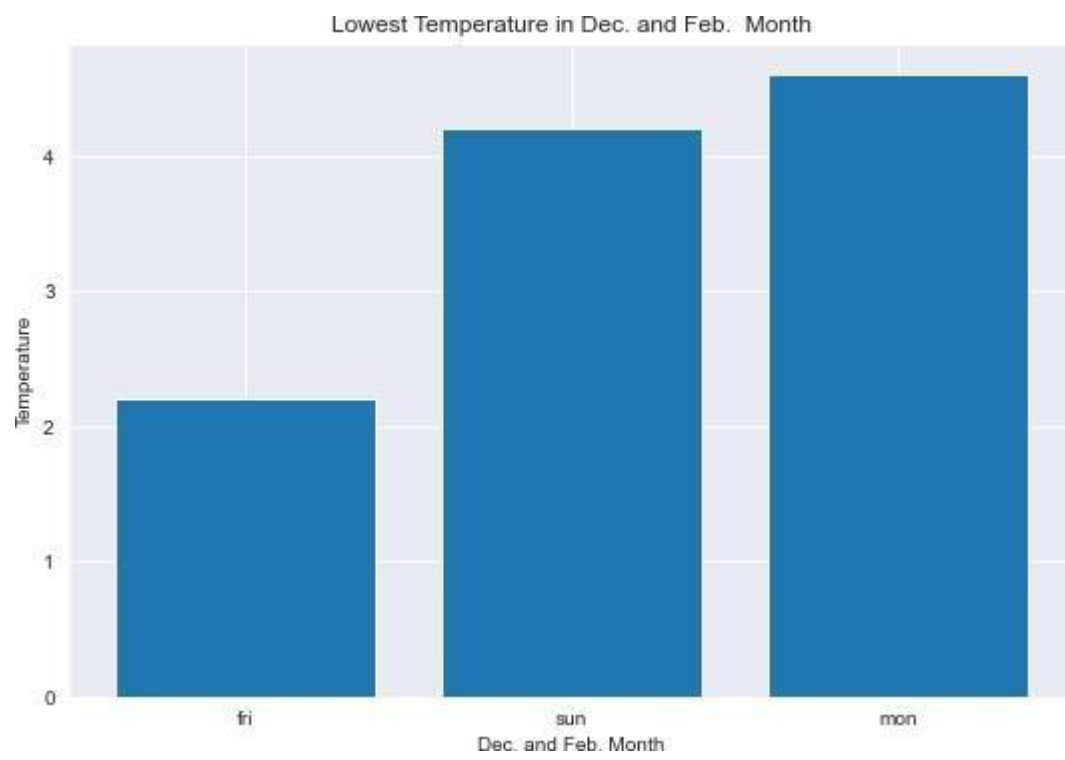
plt.xlabel("Day") plt.xlabel("Aug.
Month")

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
---	---	-------	-----	------	-----	----	-----	------	----	------	------	--------

07	5	mar	fri	86.2	26.2	94.3	5.1	8.2	51	6.7	0.0	0.0
17	4	oct	tue	90.6	35.4	669.1	6.7	18.0	33	0.9	0.0	0.0
27	4	oct	sat	90.6	43.7	686.9	6.7	14.6	33	1.3	0.0	0.0
38	6	mar	fri	91.7	33.3	77.5	9.0	8.3	97	4.0	0.2	0.0
48	6	mar	sun	89.3	51.3	102.2	9.6	11.4	99	1.8	0.0	0.0
58	6	aug	sun	92.3	85.3	488.0	14.7	22.2	29	5.4	0.0	0.0
68	6	aug	mon	92.3	88.9	495.6	8.5	24.1	27	3.1	0.0	0.0
78	6	aug	mon	91.5	145.4	608.2	10.7	8.0	86	2.2	0.0	0.0
88	6	sep	tue	91.0	129.5	692.6	7.0	13.1	63	5.4	0.0	0.0
97	5	sep	sat	92.5	88.0	698.6	7.1	22.8	40	4.0	0.0	0.0
107	5	sep	sat	92.5	88.0	698.6	7.1	17.8	51	7.2	0.0	0.0
117	5	sep	sat	92.8	73.2	713.0	22.6	19.3	38	4.0	0.0	0.0
126	5	aug	fri	63.5	70.8	665.3	0.8	17.0	72	6.7	0.0	0.0
136	5	sep	mon	90.9	126.5	686.5	7.0	21.3	42	2.2	0.0	0.0
146	5	sep	wed	92.9	133.3	699.6	9.2	26.4	21	4.5	0.0	0.0
156	5	sep	fri	93.3	141.2	713.9	13.9	22.9	44	5.4	0.0	0.0
165	5	mar	sat	91.7	35.8	80.8	7.8	15.1	27	5.4	0.0	0.0
178	5	oct	mon	84.9	32.8	664.2	3.0	16.7	47	4.9	0.0	0.0
186	4	mar	wed	89.2	27.9	70.8	6.3	15.9	35	4.0	0.0	0.0
196	4	apr	sat	86.3	27.4	97.1	5.1	9.3	44	4.5	0.0	0.0
206	4	sep	tue	91.0	129.5	692.6	7.0	18.3	40	2.7	0.0	0.0
215	4	sep	mon	91.8	78.5	724.3	9.2	19.1	38	2.7	0.0	0.0
227	4	jun	sun	94.3	96.3	200.0	56.1	21.0	44	4.5	0.0	0.0
237	4	aug	sat	90.2	110.9	537.4	6.2	19.5	43	5.8	0.0	0.0
247	4	aug	sat	93.5	139.4	594.2	20.3	23.7	32	5.8	0.0	0.0
257	4	aug	sun	91.4	142.4	601.4	10.6	16.3	60	5.4	0.0	0.0
267	4	sep	fri	92.4	117.9	668.0	12.2	19.0	34	5.8	0.0	0.0
277	4	sep	mon	90.9	126.5	686.5	7.0	19.4	48	1.3	0.0	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	temp	temp	rain		output	output	rain
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	FFMC	FFMC	DMC	DMC	DCDC	ISI	ISI	temp	temp	RH	RH	wind	wind	rain	rain
	day	day	month	month	day	day	FFMC	FFMC	DMC	DMC	DCDC	ISI	ISI	temp	temp	RH	RH	wind	wind	rain	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	4	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

	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	DMCDMC	DCDC	ISI	temptemp	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	DMC	DMC	DCDC	ISI	ISI	RHR	RH	wind	wind	rain
			month	month							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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