EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRES PROJECT DEVELOPMENT PHASE

SPRINT 2

Date	05.11.2022
Team ID	PNT2022TIMD48018
Project Name	Emerging Methods For Early Detection Of Forest Fires
Team Leader	Ranjith kumar.M
Team Members	Dillip kumar
	Hari Krishnan
	Gowsalya

In[4]: importmatplotlib.pyplotasplt importnumpyasnpimportpandas

aspdimportseabornassns

from sklearn import metrics from sklearn.metrics import

classification_report,confusion_matrix

In[5]: importwarningswarnings_filterwarnings(action="ignore")

%matplotlibinlinesns_set_style('darkgrid')

pd_set_option("display.max_rows",1000)

pd_set_option("display_max_columns",1000)

#showthefirst15 instanceofdatasetfires_head(15)

Out[6]:			XYm	onth	day	FFMC	DMC	DC		ISItemp	RHw	indraina	area	
	0		75	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		74	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		86	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		86	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		86	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	8.0	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
0.0	146 0-0		5	se	ер	wed	92.91	33.3699	.69.2	26	.4	21	4.5	

In[7]: fires_shape

(517**,**13**)**

Out[7]:

Out[8]:

In[8]: #showt he /ast10 instances ofdat asetf ires_tail(1!)

	X	Υ	month	day	FFMC	DMC	DC	ISI	temp	RH	wind	rain	area
502	4	4	aug	tue	96.1	181.1	671.2	14.3	20.7	69	4.9	0.4	0.00
503	2	4	aug	wed	94.5	139.4	689.1	20.0	29.2	30	4.9	0.0	1.95
504	4	3	aug	wed	94.5	139.4	689.1	20.0	28.9	29	4.9	0.0	49.59
505	1	2	aug	thu	91.0	163.2	744.4	10.1	26.7	35	1.8	0.0	5.80
506	1	2	aug	fri	91.0	166.9	752.6	7.1	18.5	73	8.5	0.0	0.00
507	2	4	aug	fri	91.0	166.9	752.6	7.1	25.9	41	3.6	0.0	0.00
508	1	2	aug	fri	91.0	166.9	752.6	7.1	25.9	41	3.6	0.0	0.00
509	5	4	aug	fri	91.0	166.9	752.6	7.1	21.1	71	7.6	1.4	2.17
510	6	5	aug	fri	91.0	166.9	752.6	7.1	18.2	62	5.4	0.0	0.43
511	8	6	aug	sun	81.6	56.7	665.6	1.9	27.8	35	2.7	0.0	0.00
512	4	3	aug	sun	81.6	56.7	665.6	1.9	27.8	32	2.7	0.0	6.44
513	2	4	aug	sun	81.6	56.7	665.6	1.9	21.9	71	5.8	0.0	54.29
514	7	4	aug	sun	81.6	56.7	665.6	1.9	21.2	70	6.7	0.0	11.16
515	1	4	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:517entries,0to516Data
columns(total13columns):
#ColumnNon-NullCountDtype

0 X517non-nullint64

- 1 Y 517non-nullint64
- 2 month517non-nullobject
- 3 day517non-nullobject
- 4 FFMC517non-nullfloat645DMC517non-nullfloat64
 - 6 DC517non-nullfloat64
 - 7 ISI517non-nullfloat64
 - 8 temp517non-nullfloat64
 - 9 RH517non-nullint64
 - 10 wind517non-nullfloat64

- 11 rain517non-nullfloat64
- 12 area517non-nullfloat64dtypes:float64(8),int64(3),object(2)memoryusage:52.6+KB

In[10]:
Out[10]:

#generatedescriptivestatisticsofeachattributefires_describe()_T

count

X	517.0	4.669246	2.313778	1.0	3.0	4.00	7.00	9.00
Υ	517.0	4.299807	1.229900	2.0	4.0	4.00	5.00	9.00
FFMC	517.0	90.644681	5.5201111	8.7	90.2	91.60	92.90	96.20

DMC 517.0 110.872340 64.046482 1.1 68.6 108.30 142.40 291.30DC 517.0 547.940039 248.066192 7.9 437.7 664.20 713.90 860.60

fires['area']_values[fires['area']_values>0]=1 #renaming theareaattribute tooutputforclearunders tanding fires=fires_rename(columns={'area':'output'})fires_head(10) ISI 517.0 9.021663 4.559477 0.0 6.5 8.40 10.80 56.10 517.0 18.889168 5.806625 2.2 15.5 19.30 22.80 33.30 temp 517.0 44.288201 16.31746915.0 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 0.00 6.40 rain 517.0 0.021663 0.295959 0.0 0.0 0.00 517.0 12.847292 63.655818 0.0 0.0 0.52 6.57 1090.84 area

In[11]:

 $\verb"Out[11]: XYmonth dayFFMCDMC DC ISItempRHwindrain output"$

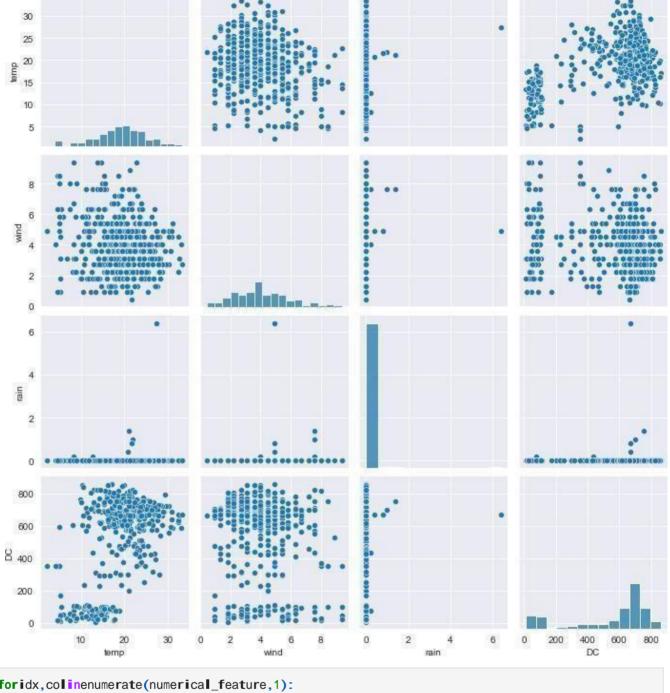
4 octsat 90.6 43.7 686.9 6.7 14.6 33 1.3 0.0 0.0 6 marfrimar 91.7 33.3 77.5 9.0 8.3 97 4.0 0.2 0.0 8 6 sun 89.3 51.3 102.2 9.6 11.4 99 1.8 0.0 0.0 6 augsun 92.3 85.3 488.0 14.7 22.2 29 5.4 0.0 0.0 6 aug mon 92.3 88.9 495.6 8.5 24.1 27 3.1 0.0 0.0 8 6 sepsat 91.5 145.4 608.2 10.7 8.0 86 2.2 0.0 0.0 9 1.0 129.5 692.6 7.0 13.1 63 5.4 0.0 0.0	0	7	5	mar	86.2	26.2	94.3	5.1	8.2	51	6.7	0.0	0.0
4 octsat 90.6 43.7 686.9 6.7 14.6 33 1.3 0.0 0.1 2 7 6 marfrimar 91.7 33.3 77.5 9.0 8.3 97 4.0 0.2 0.1 3 8 6 sun 89.3 51.3 102.2 9.6 11.4 99 1.8 0.0 0.1 4 8 6 augsun 92.3 85.3 488.0 14.7 22.2 29 5.4 0.0 0.1 6 aug mon 92.3 88.9 495.6 8.5 24.1 27 3.1 0.0 0.1 aug monsep tue 5 8 6 91.5 145.4 608.2 10.7 8.0 86 2.2 0.0 0.1 6 8 91.0 129.5 692.6 7.0 13.1 63 5.4 0.0 0.1	1	7	4	friocttue	90.6	35.4 60	59.1	6.7	18.0	33	0.9	0.0	0.0
6 marfrimar 91.7 33.3 77.5 9.0 8.3 97 4.0 0.2 0.1 3 8 6 sun 89.3 51.3 102.2 9.6 11.4 99 1.8 0.0 0.1 4 8 6 augsun 92.3 85.3 488.0 14.7 22.2 29 5.4 0.0 0.1 6 aug mon 92.3 88.9 495.6 8.5 24.1 27 3.1 0.0 0.1 aug monsep tue 5 8 6 91.5 145.4 608.2 10.7 8.0 86 2.2 0.0 0.1 6 8 91.0 129.5 692.6 7.0 13.1 63 5.4 0.0 0.1	•		4	octsat	90.6	43.7 68	36.9	6.7	14.6	33	1.3	0.0	0.0
6 augsun 92.3 85.3 488.0 14.7 22.2 29 5.4 0.0 0.4 6 aug mon 92.3 88.9 495.6 8.5 24.1 27 3.1 0.0 0.4 aug monsep tue 5 8 6 91.5 145.4 608.2 10.7 8.0 86 2.2 0.0 0.4 6 8 91.0 129.5 692.6 7.0 13.1 63 5.4 0.0 0.4	2	7	6	marfrimar	91.7	33.3	77.5	9.0	8.3	97	4.0	0.2	0.0
6 aug mon 92.3 88.9 495.6 8.5 24.1 27 3.1 0.0 0.0 aug monsep tue 5 8 6 91.5 145.4 608.2 10.7 8.0 86 2.2 0.0 0.0 6 8 91.0 129.5 692.6 7.0 13.1 63 5.4 0.0 0.0 5	3	8	6	sun	89.3	51.3 10	02.2	9.6	11.4	99	1.8	0.0	0.0
aug monsep tue 5 8 6 91.5 145.4 608.2 10.7 8.0 86 2.2 0.0 0.6 6 8 91.0 129.5 692.6 7.0 13.1 63 5.4 0.0 0.6 5	4	8	6	augsun	92.3	85.3 48	38.0 14.	7	22.2	29	5.4	0.0	0.0
6 8 91.0 129.5 692.6 7.0 13.1 63 5.4 0.0 0.0				aug monsep	92.3	88.9 49	95.6	8.5	24.1	27	3.1	0.0	0.0
5	5	8	6	sepsat	91.5 1	45.4 608	3.2 10.7		8.0	86	2.2	0.0	0.0
7 8 92.5 88.0 698.6 7.1 22.8 40 4.0 0.0 0.0	6	8	6		91.0 12	29.5 692	2.6	7.0	13.1	63	5.4	0.0	0.0
	7	8	5		92.5	88.0 69	98.6	7.1	22.8	40	4.0	0.0	0.0

In[12]: Out[12]:	fires_co	orr()									
X		Y	FFM	C DMC	DC	ISI	temp	RH	wind		
	X	1.000000	0.539548	-0.021039	-0.048384	-0.085916	0.006210	-0.051258	0.085223	0.018798	0.065
	Υ	0.539548	1.000000	-0.046308	0.007782	-0.101178	-0.024488	-0.024103	0.062221	-0.020341	0.033
	FFMC	-0.021039	-0.046308	1.000000	0.382619	0.330512	0.531805	0.431532	-0.300995	-0.028485	0.056
	DMC -	0.048384	0.007782	0.382619	1.000000	0.682192	0.305128	0.469594	0.073795	-0.105342	0.074
	DC -	0.085916	-0.101178	0.330512	0.682192	1.000000	0.229154	0.496208	-0.039192	-0.203466	0.035
	ISI	0.006210	-0.024488	0.531805	0.305128	0.229154	1.000000	0.394287	-0.132517	0.106826	0.067
	temp -	0.051258	-0.024103	0.431532	0.469594	0.496208	0.394287	1.000000	-0.527390	-0.227116	0.069
	RH	0.085223	0.062221	-0.300995	0.073795	-0.039192	-0.132517	-0.527390	1.000000	0.069410	0.099
	wind	0.018798	-0.020341	-0.028485	-0.105342	-0.203466	0.106826	-0.227116	0.069410	1.000000	0.061
	rain	0.065387	0.033234	0.056702	0.074790	0.035861	0.067668	0.069491	0.099751	0.061119	1.000
	output	0.062491	0.056892	0.073823	0.062672	0.096724	0.035663	0.076047	'-0.035 5 87	0.05570	20.025

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

#Printitin/isttype..
print(list(numerical_feature))

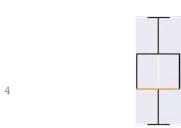
['X','Y','FFMC','DMC','DC','ISI','temp','RH','wind','rain','output']
```



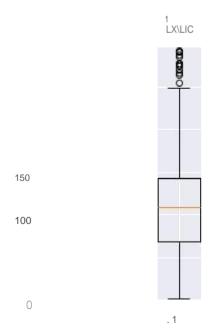
In[17]: foridx,colinenumerate(numerical_feature,1):
 plt_figure(figsize=(5,5))

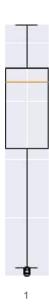
p/t.subp/ot(/en(numerical_feature)//2,3,idx)plt_boxplot(fires[col])
plt_title(col)

p/t.hist(fires[col])
plt_tight_layout()
plt_show(plt)







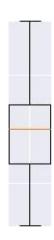




1 (

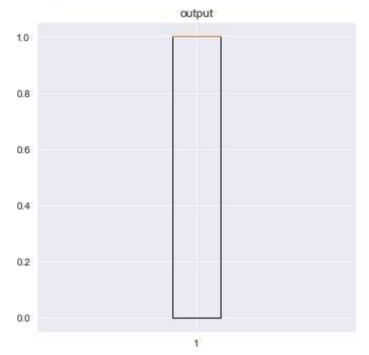


wind

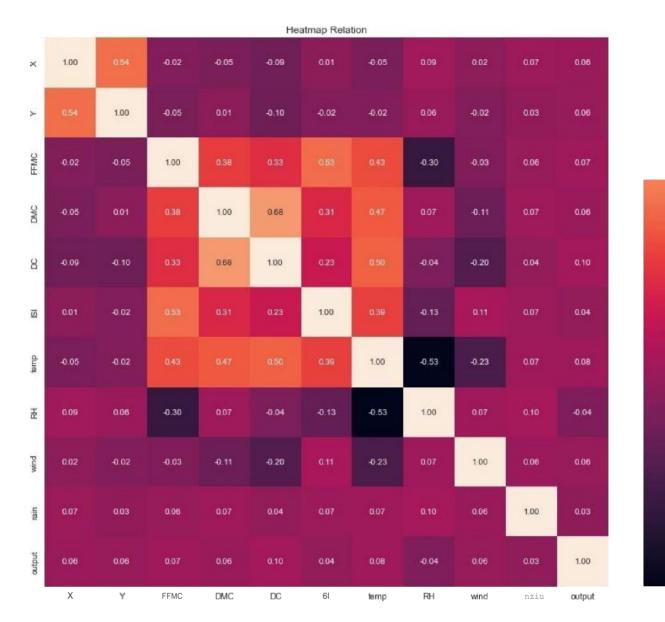


Temp





```
In[18]: plt_figure(figsize=(15, 12)) plt_title("Heatmap Relation")
sns_heatmap(fires[numerical_feature]_corr(),annot=True,fmt='.2f');
```



—1.D

-DB

0.6

- 0.4

- 0.2

- 0.0

- -0.2

- -0.4

```
In[19]: highest_rain=fires_sort_values(by='rain', ascending=False)[['month', 'day', 'rain']]_head()
highest_rain
```

```
Out[19]: monthdayrain

499 aug tue 6.4

509 aug fri 1.4
```

243

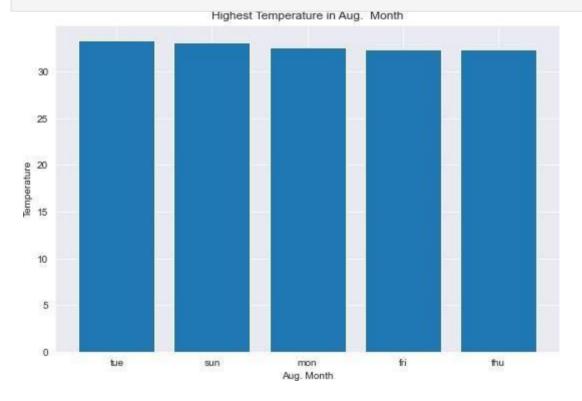
500 aug tue 0.8

sun

aug

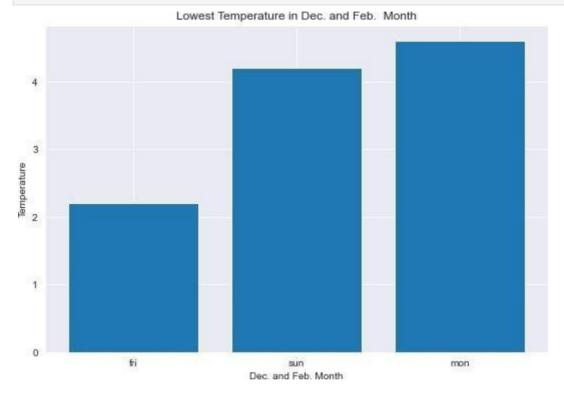
1.0

501 aug tue 0.8



```
In[21]: lowest_temp=fires_sort_values(by='temp',ascending=True)[['month','day','temp']]_head()
plt_figure(figsize=(9,6))
plt_title("LowestTemperatureinDec_andFeb_Month")
plt_bar(lowest_temp['day'],lowest_temp['temp'])

plt_xlabel("Day")
plt_xlabel("Dec_andFeb_Month")
plt_ylabel("Temperature")plt_show()
```



In[22]: fires

X	′	month	day	FFMCD	МС	DC	ISI	temp		RHwin	draino	utput
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 B	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 B	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 B	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
107	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	8.0	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
146	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 B	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
206	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
247	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
267	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

Ou**t[**22**]**:

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		9.2	21.2	32	2.7	0.0	0.0
35 6	3	sep	tue	90.3		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
Y	Y	month	dav	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		126.5		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 50 4	4	mar	mon	87.6 92.9	52.2 137.0	103.8 706.4	5.0	11.0 20.8	46 17	5.8	0.0	0.0
51 4	3	sep aug	sun	92.9	99.6	631.2	9.2 6.3	21.5	34	1.3 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		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	3 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	1 2	2	mar	sun	89.3	51.3	102.2	9.6	5.5	59	6.3	0.0	0.0
62	2 2	2	aug	thu	93.0	75.3	466.6	7.7	18.8	35	4.9	0.0	0.0
63	3 2	2	aug	sun	90.2	99.6	631.2	6.3	20.8	33	2.7	0.0	0.0
64	1 2	2	aug	mon	91.1	103.2	638.8	5.8	23.1	31	3.1	0.0	0.0
65	5 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	7 2	2	sep	fri	92.4	117.9	668.0	12.2	19.6	33	5.4	0.0	0.0
68	3 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	۱4	5	sep	fri	94.3	85.1	692.3	15.9	17.7	37	3.6	0.0	0.0
72	2 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		54	sep	fri	93.3	141.2	713.9	13.9	27.6	30	1.3	0.0	0.0
75		99	feb	thu	84.2	6.8	26.6	7.7	6.7	79	3.1	0.0	0.0
76		99	feb	fri	86.6	13.2	43.0	5.3	15.7	43	3.1	0.0	0.0
77		13	mar	mon	87.6	52.2	103.8	5.0	8.3	72	3.1	0.0	0.0
78		12	aug	fri	90.1	108.0	529.8	12.5	14.7	66	2.7	0.0	0.0
79		12	aug	tue	91.0	121.2	561.6	7.0	21.6	19	6.7	0.0	0.0
80		12	aug	sun	91.4	142.4	601.4	10.6	19.5	39	6.3	0.0	0.0
81		12	aug	sun	90.2	99.6	631.2	6.3	17.9	44	2.2	0.0	0.0
82		12	aug	tue	94.8	108.3	647.1	17.0	18.6	51	4.5	0.0	0.0
83		12	aug	wed	92.1	111.2	654.1	9.6	16.6	47	0.9	0.0	0.0
84		12	aug	thu	91.7	114.3	661.3	6.3	20.2	45	3.6	0.0	0.0
85		12	sep	thu	92.9	137.0	706.4	9.2	21.5	15	0.9	0.0	0.0
86		12	sep	thu	92.9	137.0	706.4	9.2	25.4	27	2.2	0.0	0.0
87		12	sep	thu	92.9	137.0	706.4	9.2	22.4	34	2.2	0.0	0.0
88		12	sep	sun	93.5	149.3	728.6	8.1	25.3	36	3.6	0.0	0.0
89		65	mar	sat	91.7	35.8	80.8	7.8	17.4	25	4.9	0.0	0.0
90		65	aug	sat	90.2	96.9	624.2	8.9	14.7	59	5.8	0.0	0.0
91		86	mar	fri	91.7	35.8	80.8	7.8	17.4	24	5.4	0.0	0.0
92		86	aug	sun	92.3	85.3	488.0	14.7	20.8	32	6.3	0.0	0.0

93	86	aug	sun	91.4	142.4	601.4	10.6	18.2	43	4.9	0.0	0.0
94	86	aug	mon	91.1	103.2	638.8	5.8	23.4	22	2.7	0.0	0.0
95	44	sep	sun	89.7	90.0	704.4	4.8	17.8	64	1.3	0.0	0.0
96	34	feb	sat	83.9	8.0	30.2	2.6	12.7	48	1.8	0.0	0.0
97	34	mar	sat	69.0	2.4	15.5	0.7	17.4	24	5.4	0.0	0.0
98	34	aug	sun	91.4	142.4	601.4	10.6	11.6	87	4.5	0.0	0.0
99	34	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
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

									RH w	ind rai	n outp	ut
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
117 3	4	mar	mon	90.1	39.7	86.6	6.2	10.6	30	4.0	0.0	0.0
	_			•••		400.0		40.0				
119 3 120 3	4	aug aug	thu mon	93.0 91.5	75.3 145.4	466.6 608.2	7.7 10.7	19.6 10.3	36 74	3.1 2.2	0.0	0.0
120 3	7	auy	mon	91.5	143.4	000.2	10.7	10.3	/4	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

Х	Y mor	nth	day F	FMC D	МС	DC	ISIt	emp				
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
147 8	3	sep	tue	84.4	73.4	671.9	3.2	24.2	28	3.6	0.0	1.0
148 2	2	aug	tue	94.8	108.3	647.1	17.0	17.4	43	6.7	0.0	1.0
149 8	6	sep	thu	93.7	80.9	685.2	17.9	23.7	25	4.5	0.0	1.0
150 6	5	jun	fri	92.5	56.4	433.3	7.1	23.2	39	5.4	0.0	1.0
151 9	9	jul	sun	90.1	68.6	355.2	7.2	24.8	29	2.2	0.0	1.0
152 3	4	jul	sat	90.1	51.2	424.1	6.2	24.6	43	1.8	0.0	1.0
153 5	4	sep	fri	94.3	85.1	692.3	15.9	20.1	47	4.9	0.0	1.0
154 1	5	sep	sat	93.4	145.4	721.4	8.1	29.6	27	2.7	0.0	1.0
155 7	4	aug	sun	94.8	108.3	647.1	17.0	16.4	47	1.3	0.0	1.0
156 2	4	sep	sat	93.4	145.4	721.4	8.1	28.6	27	2.2	0.0	1.0
157 2	2	aug	wed	92.1	111.2	654.1	9.6	18.4	45	3.6	0.0	1.0
158 2	4	aug	wed	92.1	111.2	654.1	9.6	20.5	35	4.0	0.0	1.0
159 7	4	sep	fri	92.4	117.9	668.0	12.2	19.0	34	5.8	0.0	1.0
160 7	4	mar	mon	90.1	39.7	86.6	6.2	16.1	29	3.1	0.0	1.0
161 6	4	aug	thu	95.2	131.7	578.8	10.4	20.3	41	4.0	0.0	1.0
162 6	3	mar	sat	90.6	50.1	100.4	7.8	15.2	31	8.5	0.0	1.0
163 8	6	sep	sat	92.5	121.1	674.4	8.6	17.8	56	1.8	0.0	1.0
164 8	5	sep	sun	89.7	90.0	704.4	4.8	17.8	67	2.2	0.0	1.0
165 6	5	mar	thu	84.9	18.2	55.0	3.0	5.3	70	4.5	0.0	1.0
166 6	5	aug	wed	92.1	111.2	654.1	9.6	16.6	47	0.9	0.0	1.0
167 6	5	aug	wed	96.0	127.1	570.5	16.5	23.4	33	4.5	0.0	1.0
168 6	5	mar	fri	91.2	48.3	97.8	12.5	14.6	26	9.4	0.0	1.0
169 8	6	aug	thu	95.2	131.7	578.8	10.4	20.7	45	2.2	0.0	1.0
170 5	4	sep	wed	92.9	133.3	699.6	9.2	21.9	35	1.8	0.0	1.0
171 8	6	aug	wed	85.6	90.4	609.6	6.6	17.4	50	4.0	0.0	1.0
172 7	4	aug	sun	91.4	142.4	601.4	10.6	20.1	39	5.4	0.0	1.0
173 4	4	sep	mon	90.9	126.5	686.5	7.0	17.7	39	2.2	0.0	1.0

175 1 4 aug sat 90.2 96.9 624.2 8.9 20.3 39 4.9 0.0 1.0 176 6 5 apr thu 81.5 9.1 55.2 2.7 5.8 54 5.8 0.0 1.0 177 2 5 aug sun 90.2 99.6 631.2 6.3 19.2 44 2.7 0.0 1.0 178 2 5 sep wed 90.1 82.9 735.7 6.2 18.3 45 2.2 0.0 1.0 179 8 6 aug tue 88.8 147.3 614.5 9.0 14.4 66 5.4 0.0 1.0 180 1 3 sep sun 92.4 124.1 680.7 8.5 23.9 32 6.7 0.0 1.0 181 8 6 oct mon 91.7 48.5 696.1 11.1 16.8 45 4.5 0.0
177 2 5 aug sun 90.2 99.6 631.2 6.3 19.2 44 2.7 0.0 1.0 178 2 5 sep wed 90.1 82.9 735.7 6.2 18.3 45 2.2 0.0 1.0 179 8 6 aug tue 88.8 147.3 614.5 9.0 14.4 66 5.4 0.0 1.0 180 1 3 sep sun 92.4 124.1 680.7 8.5 23.9 32 6.7 0.0 1.0 181 8 6 oct mon 84.9 32.8 664.2 3.0 19.1 32 4.0 0.0 1.0 182 5 4 feb sun 86.8 15.6 48.3 3.9 12.4 53 2.2 0.0 1.0 183 7 4 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 1.0 RH wind rainoutput 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 89.3 51.3 102.2 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 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 1.0 195 2 5 aug fri 93.9 135.7 586.7 15.1 23.5 36 5.4 0.0 1.0 195 2 5 aug fri 93.9 135.7 586.7 15.1 23.5 36 5.4 0.0 1.0 195 2 5 aug fri 93.9 135.7 586.7 15.1 23.5 36 5.4 0.0 1.0
178 2 5 sep wed 90.1 82.9 735.7 6.2 18.3 45 2.2 0.0 1.0 179 8 6 aug tue 88.8 147.3 614.5 9.0 14.4 66 5.4 0.0 1.0 180 1 3 sep sun 92.4 124.1 680.7 8.5 23.9 32 6.7 0.0 1.0 181 8 6 oct mon 84.9 32.8 664.2 3.0 19.1 32 4.0 0.0 1.0 182 5 4 feb sun 86.8 15.6 48.3 3.9 12.4 53 2.2 0.0 1.0 183 7 4 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 1.0 RH wind rainoutput 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 89.3 51.3 102.2 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 1.0 193 4 5 sep wed 92.9 133.3 699.6 9.2 24.3 25 4.0 0.0 1.0 193 4 5 sep wed 92.9 133.3 699.6 9.2 24.3 25 4.0 0.0 1.0 195 2 5 aug true 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 1.0 195 2 5 aug fri 93.9 135.7 586.7 15.1 23.5 36 5.4 0.0 1.0
179 8 6 aug tue 88.8 147.3 614.5 9.0 14.4 66 5.4 0.0 1.0 180 1 3 sep sun 92.4 124.1 680.7 8.5 23.9 32 6.7 0.0 1.0 181 8 6 oct mon 84.9 32.8 664.2 3.0 19.1 32 4.0 0.0 1.0 182 5 4 feb sun 86.8 15.6 48.3 3.9 12.4 53 2.2 0.0 1.0 183 7 4 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 1.0 RH wind rainoutput 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 89.3 51.3 102.2 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 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 1.0 195 2 5 aug fri 93.9 135.7 586.7 15.1 23.5 36 5.4 0.0 1.0 195 4 5 sep thu 81.5 9.1 55.2 2.7 5.8 54 5.8 0.0 1.0
180 1 3 sep sun 92.4 124.1 680.7 8.5 23.9 32 6.7 0.0 1.0 181 8 6 oct mon 84.9 32.8 664.2 3.0 19.1 32 4.0 0.0 1.0 182 5 4 feb sun 86.8 15.6 48.3 3.9 12.4 53 2.2 0.0 1.0 183 7 4 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 34 185 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 89.3 51.3 102.2 9.6 11.5 39 5.8 0.0 1.0
181 8 6 oct mon 84.9 32.8 664.2 3.0 19.1 32 4.0 0.0 1.0 182 5 4 feb sun 86.8 15.6 48.3 3.9 12.4 53 2.2 0.0 1.0 183 7 4 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 RH wind rainoutput 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 89.3 51.3 102.2 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 1.0 195 2 5 aug fri 93.9 135.7 586.7 15.1 23.5 36 5.4 0.0 1.0 195 2 5 apr thu 81.5 9.1 55.2 2.7 5.8 54 5.8 0.0 1.0
182 5 4 feb sun 86.8 15.6 48.3 3.9 12.4 53 2.2 0.0 1.0 183 7 4 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 34 185 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 89.3 51.3 102.2 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 1.0 187 1 5 sep mon 90.9 126.5 686.5 7.0 21.0 42 2.2 0.0 1.0
183 7 4 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 1.0 RH wind rainoutput 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 89.3 51.3 102.2 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 1.0 194 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
184 8 6 aug fri 93.9 135.7 586.7 15.1 20.8 34 185 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 89.3 51.3 102.2 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 <
4.9 1.0 RH wind rainoutput 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 89.3 51.3 102.2 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
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 89.3 51.3 102.2 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
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 <t< td=""></t<>
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
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
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 70
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
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
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
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
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
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
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
400.2 4 400 400 5 600 6 70 420 50 62 00 40
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 sepmon 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
000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 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

Х	Y mor	nth	day F	FMC D	MC	DC	ISIte	emp				
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	marı	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	marr	non	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

			•					•				•
2224	3	mar	mon	87.6	52.2	103.8	5.0	11.0	46	5.8	0.0	1.0
223 2	2	jul	fri	88.3	150.3	309.9	6.8	13.4	79	3.6	0.0	1.0
224 7	4	sep	wed	90.1	82.9	735.7	6.2	15.4	57	4.5	0.0	1.0
225 4	4	sep	sun	93.5	149.3	728.6	8.1	22.9	39	4.9	0.0	1.0
226 7	5	oct	mon	91.7	48.5	696.1	11.1	16.1	44	4.0	0.0	1.0
227 8	6	aug	sat	92.2	81.8	480.8	11.9	20.1	34	4.5	0.0	1.0
228 4	6	sep	sun	93.5	149.3	728.6	8.1	28.3	26	3.1	0.0	1.0
229 8	6	aug	sat	92.2	81.8	480.8	11.9	16.4	43	4.0	0.0	1.0
230 4	4	sep	wed	92.9	133.3	699.6	9.2	26.4	21	4.5	0.0	1.0
231 1	5	sep	sun	93.5	149.3	728.6	8.1	27.8	27	3.1	0.0	1.0
232 6	4	sep	tue	91.0	129.5	692.6	7.0	18.7	43	2.7	0.0	1.0
233 9	4	sep	tue	84.4	73.4	671.9	3.2	24.3	36	3.1	0.0	1.0
234 4	5	sep	sat	92.5	121.1	674.4	8.6	17.7	25	3.1	0.0	1.0
235 8	6	aug	sun	91.4	142.4	601.4	10.6	19.6	41	5.8	0.0	1.0
236 2	2	sep	sat	92.5	121.1	674.4	8.6	18.2	46	1.8	0.0	1.0
237 1	2	sep	tue	91.0	129.5	692.6	7.0	18.8	40	2.2	0.0	1.0
238 6	5	sep	sat	92.5	121.1	674.4	8.6	25.1	27	4.0	0.0	1.0
239 7	5	apr	sun	81.9	3.0	7.9	3.5	13.4	75	1.8	0.0	0.0
240 6	3	apr	wed	88.0	17.2	43.5	3.8	15.2	51	2.7	0.0	0.0
241 4	4	apr	fri	83.0	23.3	85.3	2.3	16.7	20	3.1	0.0	0.0
242 2	4	aug	sun	94.2	122.3	589.9	12.9	15.4	66	4.0	0.0	1.0
243 7	4	aug	sun	91.8	175.1	700.7	13.8	21.9	73	7.6	1.0	0.0
244 2	4	aug	sun	91.8	175.1	700.7	13.8	22.4	54	7.6	0.0	1.0
245 3	4	aug	sun	91.8	175.1	700.7	13.8	26.8	38	6.3	0.0	1.0
246 5	4	aug	sun	91.8	175.1	700.7	13.8	25.7	39	5.4	0.0	1.0
247 2	4	aug	wed	92.2	91.6	503.6	9.6	20.7	70	2.2	0.0	1.0
248 8	6	aug	wed	93.1	157.3	666.7	13.5	28.7	28	2.7	0.0	0.0

day FFMC DMC

DC

ISI temp

RH wind rain output

X Y month

sat 0.0

249 3 4 aug wed 93.1 157.3 666.7 13.5 21.7 40 0.4 0.0 1.0 250 8 5 aug wed 93.1 157.3 666.7 13.5 26.8 25 3.1 0.0 1.0 253 6 5 aug wed 93.1 157.3 666.7 13.5 24.0 36 3.1 0.0 1.0 253 7 4 aug thu 91.9 109.2 565.5 8.0 21.4 38 2.7 0.0 1.0 254 6 3 aug thu 87.5 77.0 694.8 5.0 22.3 46 4.0 0.0 1.0 255 2 5 aug thu 87.5 77.0 894.8 5.0 22.3 46 4.0 0.0 1.0 257 4 3 aug sat 91.2 17.2 581.1 11.0 21.4 42 2.7 0.0<	Х	Y mont	th	day FF	MC D	МС	DC	ISI	temp	R	H wind	rain	output
251 8 5 aug wed 93.1 157.3 666.7 13.5 24.0 36 3.1 0.0 1.0 252 6 5 aug wed 93.1 157.3 666.7 13.5 22.1 37 3.6 0.0 1.0 253 7 4 aug thu 91.9 109.2 565.5 8.0 21.4 38 2.7 0.0 1.0 253 7 4 aug thu 87.5 77.0 694.8 5.0 22.3 46 4.0 0.0 0.0 255 2 5 aug thu 87.5 77.0 694.8 5.0 22.3 46 4.0 0.0 0.0 256 8 6 aug sat 94.2 117.2 581.1 11.0 23.9 41 2.2 0.0 1.0 257 4 3 aug sat 94.2 117.2 581.1 11.0 21.4 44 2.7 0.0 1.0 258 3 4 aug sat 91.8 170.9692.313.7 20.6 59 0.9 0.0 259 7 4 aug mon 93.6 97.9 542.0 14.4 28.3 32 4.0 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 aug tue 93.7 102.2 550.3 14.6 22.1 54 7.6 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 21.0 53 2.7 0.0 1.0 270 2 2 aug tue 92.1 152.6 658.2 14.3 21.0 53 2.7 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 1.0 271 8 6 aug tue 92.1 152.6 658.2 14.3 20.2 47 4.0 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	249 3	4	aug	wed	93.1	157.3	666.7	13.5	21.7	40	0.4	0.0	1.0
252 6 5 aug wed 93.1 157.3 666.7 13.5 22.1 37 3.6 0.0 1.0 253 7 4 aug thu 91.9 109.2 565.5 8.0 21.4 38 2.7 0.0 1.0 254 6 3 aug thu 91.6 138.1 621.7 6.3 18.9 41 3.1 0.0 1.0 255 2 5 aug thu 87.5 77.0 694.8 5.0 22.3 46 4.0 0.0 0.0 256 8 6 aug sat 94.2 117.2 581.1 11.0 23.9 41 2.2 0.0 1.0 257 4 3 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 23.7 40 1.8 0.0 1.0 259 7 4 aug mon 93.6 97.9 542.0 14.4 28.3 32 4.0 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 11.2 84 7.6 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 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 0.0 269 4 4 aug tue 92.1 152.6 658.2 14.3 23.7 24 3.1 0.0 0.0 269 4 4 aug tue 92.1 152.6 658.2 14.3 23.7 24 3.1 0.0 0.0 270 2 2 aug tue 92.1 152.6 658.2 14.3 21.0 32 3.1 0.0 0.0 271 8 6 aug tue 92.1 152.6 658.2 14.3 21.0 58 4.5 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 20.1 58 4.5 0.0 1.0	250 8	5	aug	wed	93.1	157.3	666.7	13.5	26.8	25	3.1	0.0	1.0
253 7	251 8	5	aug	wed	93.1	157.3	666.7	13.5	24.0	36	3.1	0.0	1.0
254 6 3 aug thu 81.6 138.1 621.7 6.3 18.9 41 3.1 0.0 1.0 255 2 5 aug thu 87.5 77.0 694.8 5.0 22.3 46 4.0 0.0 0.0 256 8 6 aug sat 94.2 117.2 581.1 11.0 23.9 41 2.2 0.0 1.0 257 4 3 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 0.0 259 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 11.2 84 7.6 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 tue 93.7 102.2 550.3 14.6 22.1 54 7.6 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 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 0.0 269 4 4 aug tue 92.1 152.6 658.2 14.3 21.0 32 3.1 0.0 0.0 270 2 2 aug tue 92.1 152.6 658.2 14.3 21.0 58 3.1 0.0 1.0 271 8 6 aug tue 92.1 152.6 658.2 14.3 21.0 58 4.5 0.0 1.0 272 2 5 aug tue 92.1 152.6 658.2 14.3 21.8 56 3.1 0.0 1.0 273 4 6 dec sun 84.4 27.2 353.5 6.8 4.8 57 8.5 0.0 1.0 273 4 6 dec sun 84.4 27.2 353.5 6.8 4.8 57 8.5 0.0 1.0	252 6	5	aug	wed	93.1	157.3	666.7	13.5	22.1	37	3.6	0.0	1.0
255 2 5 aug thu 87.5 77.0 694.8 5.0 22.3 46 4.0 0.0 0.0 256 8 6 aug sat 94.2 117.2 581.1 11.0 23.9 41 2.2 0.0 1.0 257 4 3 aug sat 94.2 117.2 581.1 11.0 21.4 44 2.7 0.0 1.0 258 3 4 aug sat 91.8 170.9692.313.7 20.6 59 0.9 0.0 0.0 259 7 4 aug sat 91.8 170.9 692.3 13.7 20.6 59 0.9 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 11.2 84 7.6 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 aug fri 94.3 167.6 684.4 13.0 21.8 53 3.1 0.0 1.0 265 4 4 aug fri 94.3 167.6 684.4 13.0 21.8 53 3.1 0.0 1.0 265 6 5 aug tue 93.7 102.2 550.3 14.6 22.1 54 7.6 0.0 1.0 267 2 2 aug tue 92.1 152.6 658.2 14.3 23.7 24 3.1 0.0 0.0 269 4 4 aug tue 92.1 152.6 658.2 14.3 23.7 24 3.1 0.0 0.0 269 4 4 aug tue 92.1 152.6 658.2 14.3 21.8 56 3.1 0.0 0.0 1.0 271 8 6 aug tue 92.1 152.6 658.2 14.3 20.1 58 4.5 0.0 1.0 271 8 6 aug tue 92.1 152.6 658.2 14.3 20.1 58 4.5 0.0 1.0 271 8 6 aug tue 92.1 152.6 658.2 14.3 20.1 58 4.5 0.0 1.0 271 8 6 aug tue 92.1 152.6 658.2 14.3 20.1 58 4.5 0.0 1.0 271 8 6 aug tue 92.1 152.6 658.2 14.3 20.1 58 4.5 0.0 1.0 271 8 6 aug tue 92.1 152.6 658.2 14.3 20.1 58 4.5 0.0 1.0 271 8 6 aug tue 92.1 152.6 658.2 14.3 20.1 58 4.5 0.0 1.0 271 8 6 dec wed 84.0 27.8 353.5 6.8 4.8 57 8.5 0.0 1.0	253 7	4	aug	thu	91.9	109.2	565.5	8.0	21.4	38	2.7	0.0	1.0
256 8 6 aug sat 94.2 117.2 581.1 11.0 23.9 41 2.2 0.0 1.0 257 4 3 aug sat 94.2 117.2 581.1 11.0 21.4 44 2.7 0.0 1.0 258 3 4 aug 91.8 170.9692.313.7 20.6 59 0.9 0.0 259 7 4 aug mon 93.6 97.9 542.0 14.4 28.3 32 4.0 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 0.0 269 4 4 aug tue 92.1 152.6 658.2 14.3 21.0 32 3.1 0.0 0.0 270 2 2 aug tue 92.1 152.6 658.2 14.3 21.0 53 2.7 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 20.1 58 4.5 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	254 6	3	aug	thu	91.6	138.1	621.7	6.3	18.9	41	3.1	0.0	1.0
257 4 3 aug sat 94.2 117.2 581.1 11.0 21.4 44 2.7 0.0 1.0 258 3 4 aug sat 91.8 170.9692.313.7 20.6 59 0.9 0.0 0.0 259 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 11.2 84 7.6 0.0 1.0 263 6 3 aug fri 91.1 141.1 629.1 7.1 19.3 39 3.6 0.0 1.0 263 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 1.0 266 3 4 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 21.0 32 3.1 0.0 1.0 270 2 2 aug tue 92.1 152.6 658.2 14.3 21.0 53 2.7 0.0 1.0 271 8 6 aug tue 92.1 152.6 658.2 14.3 20.1 58 4.5 0.0 1.0 271 8 6 aug tue 92.1 152.6 658.2 14.3 20.1 58 4.5 0.0 1.0 271 8 6 aug tue 92.1 152.6 658.2 14.3 20.1 58 4.5 0.0 1.0 273 4 6 dec sun 84.4 27.2 353.5 6.8 4.8 57 8.5 0.0 1.0 273 4 6 dec wed 84.0 27.8 354.6 5.3 5.1 61 8.0 0.0 1.0	255 2	5	aug	thu	87.5	77.0	694.8	5.0	22.3	46	4.0	0.0	0.0
258 3 4 aug 91.8 170.9692.313.7 20.6 59 0.9 0.0 259 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 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 21.0 32 3.1 0.0 1.0 270 2 2 aug tue 92.1 152.6 658.2 14.3 21.0 53 2.7 0.0 1.0 271 8 6 aug tue 92.1 152.6 658.2 14.3 20.1 58 4.5 0.0 1.0 273 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	256 8	6	aug	sat	94.2	117.2	581.1	11.0	23.9	41	2.2	0.0	1.0
259 7	257 4	3	aug	sat	94.2	117.2	581.1	11.0	21.4	44	2.7	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 0.0 269 4 4 aug tue 92.1 152.6 658.2 14.3 21.0 32 3.1 0.0 0.0 270 2 2 aug tue 92.1 152.6 658.2 14.3 19.1 53 2.7 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 20.1 58 4.5 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	258 3	4	aug		91.8	170.9	692.31	3.7	20.6	59	0.9		0.0
261 3	259 7	4	aug	sat	91.8	170.9	692.3	13.7	23.7	40	1.8	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 20.1 58 4.5 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	260 2	4	aug	mon	93.6	97.9	542.0	14.4	28.3	32	4.0	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 20.1 58 4.5 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	261 3	4	aug	fri	91.6	112.4	573.0	8.9	11.2	84	7.6	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 20.1 58 4.5 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	262 2	4	aug	fri	91.6	112.4	573.0	8.9	21.4	42	3.1	0.0	1.0
265 4	263 6	3	aug	fri	91.1	141.1	629.1	7.1	19.3	39	3.6	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 20.1 58 4.5 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	264 4	4	aug	fri	94.3	167.6	684.4	13.0	21.8	53	3.1	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	265 4	4	aug	tue	93.7	102.2	550.3	14.6	22.1	54	7.6	0.0	1.0
268 3	266 6	5	aug	tue	94.3	131.7	607.1	22.7	19.4	55	4.0	0.0	1.0
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	267 2	2	aug	tue	92.1	152.6	658.2	14.3	23.7	24	3.1	0.0	0.0
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	268 3	4	aug	tue	92.1	152.6	658.2	14.3	21.0	32	3.1	0.0	0.0
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	269 4	4	aug	tue	92.1	152.6	658.2	14.3	19.1	53	2.7	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	270 2	2	aug	tue	92.1	152.6	658.2	14.3	21.8	56	3.1	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	271 8	6	aug	tue	92.1	152.6	658.2	14.3	20.1	58	4.5	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	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
275 4 6 dec thu 84.6 26.4 352.0 2.0 5.1 61 4.9 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

x	Y mo	nth	day F	FMC D	мс	DC	ISI t	emp	F	RH wind	rain	output
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
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 6	4	jun	sun	90.4	89.5	290.8	6.4	14.3	46	1.8	0.0	1.0
297 8	6	jun	sun	90.4		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		298.1	7.5	20.7	25	4.9	0.0	0.0
301 6	5	jun	mon	90.4		298.1	7.5	19.1	39	5.4	0.0	1.0
302 3	6	jun	fri	91.1		232.1	7.1	19.2	38	4.5	0.0	0.0

sat 0.0 1.0

Х	Y moı	nth	day F	FMC D	мс	DC	ISI t	emp	RH wind rainoutput		ıtput	
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
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

x	Y mon	ıth	day F	FMC D	МС	DC	ISI t	emp	R	H wind	l rainou	ıtput
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		91.2	124.47	95.3	8.5	17.1	41	2.2		
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
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

sat 0.0 1.0

X	Y mo	nth	day F	FMC D	МС	DC	ISI t	emp	R	H wind	l rainοι	ıtput
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

month DMC DC
X Y day FFMC ISI temp

wwinidndrairnaionutpoutput

370 74 91.0 276.3 825.1 7.1 13.8 **77** 7.6 0.0 1.0 sep sun 371 520.5 34 91.9 133.6 8.0 14.2 58 4.0 0.0 0.0 jul wed 372 45 92.0 203.2 664.5 8.1 10.4 75 0.9 0.0 0.0 aug sun 373 54 94.8 222.4 698.6 13.9 20.3 42 2.7 0.0 0.0 aug thu 374 65 fri 90.3 290.0 855.3 7.4 10.3 78 4.0 0.0 1.0 sep 375 65 sep sat 91.2 94.3 744.4 8.4 15.4 57 4.9 0.0 1.0 376 207.0 0.0 86 92.1 672.6 8.2 21.1 54 2.2 0.0 aug mon 377 231.1 715.1 42 22 93.7 8.4 21.9 2.2 0.0 1.0 aug sat 378 65 90.9 18.9 30.6 8.0 8.7 51 0.0 0.0 mar thu 5.8 379 100 45 18.7 1.1 171.4 0.0 5.2 0.9 0.0 0.0 jan sun 380 101.3 458.8 19.3 39 0.0 54 93.7 11.9 7.2 1.0 jul wed 381 86 thu 90.7 194.1 643.0 6.8 16.2 63 2.7 0.0 1.0 aug 382 86 95.2 217.7 690.0 18.0 28.2 29 1.8 0.0 1.0 aug wed 383 248.4 96 aug thu 91.6 753.8 6.3 20.5 58 2.7 0.0 1.0 384 84 91.6 273.8 819.1 7.7 21.3 44 0.0 1.0 aug sat 4.5 385 24 91.6 181.3 613.0 7.6 20.9 50 2.2 0.0 1.0 aug sun 386 34 90.5 96.7 750.5 11.4 20.6 55 0.0 1.0 sep sun 5.4 387 55 90.9 18.9 30.6 8.0 11.6 48 0.0 0.0 mar thu 5.4 388 706.7 12.0 64 aug fri 94.8 227.0 23.3 34 3.1 0.0 1.0 389 74 227.0 706.7 12.0 23.3 34 0.0 aug fri 94.8 3.1 0.0 390 74 71 0.0 84.7 9.5 58.3 4.1 feb 7.5 6.3 1.0 mon 391 20.7 46 0.0 1.0 86 fri 91.1 91.3 738.1 7.2 2.7 sep 392 13 91.0 276.3 825.1 7.1 21.9 43 4.0 0.0 1.0 sep sun 393 24 93.4 15.0 25.6 11.4 15.2 19 7.6 0.0 0.0 mar tue 394 68 65 84.1 4.6 46.7 2.2 5.3 1.8 0.0 0.0 feb mon 395 45 85.0 56.9 3.5 10.1 62 0.0 9.0 1.8 1.0 feb sun

RH

sat 1.0

396	43	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	12	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	3 4	sep	thu	91.1	88.2	731.7	8.3	22.8	46	4.0	0.0	1.0
402	99	aug	fri	94.8	227.0	706.7	12.0	25.0	36	4.0	0.0	0.0
403	86	aug	thu	90.7	194.1	643.0	6.8	21.3	41	3.6	0.0	0.0
404	24	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	65	sep		87.1	1291.38	60.6	4.0	17.0	67	4.9	0.0	
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		aug	sat		231.1		8.4	26.4	33	3.6	0.0	0.0
		_										
414 5 415 8	4 6	aug	sun	93.6	235.1	723.1 698.6	10.1 13.9	24.1	50 27	4.9	0.0	1.0
4130	•	aug	tiiu	34.0	222.4	090.0	13.3	21.3	ZI	4.3	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
wwinidndrairn		Y moi	nth	day F	FMC D	MC	DC	ISI t	emp				RH
www.manaran	аюниць	Juipui											
	444	25	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	74	sep	wed	89.7	284.9	844.0	10.1	10.5	77	4.0	0.0	0.0
449	74	aug	sun	91.6	181.3	613.0	7.6	19.3	61	4.9	0.0	0.0
450	45	aug	wed	95.2	217.7	690.0	18.0	23.4	49	5.4	0.0	1.0
451	14	aug	fri	90.5	196.8	649.9	16.3	11.8	88	4.9	0.0	1.0
452	74	aug	mon	91.5	238.2	730.6	7.5	17.7	65	4.0	0.0	0.0
453	45	aug	thu	89.4	266.2	803.3	5.6	17.4	54	3.1	0.0	0.0
454	34	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	24	aug	thu	91.6	248.4	753.8	6.3	16.6	59	2.7	0.0	0.0
457	14	aug	wed	91.7	191.4	635.9	7.8	19.9	50	4.0	0.0	1.0
458	86	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	25	aug	sat	93.7	231.1	715.1	8.4	18.9	64	4.9	0.0	0.0
461	86	aug	sat	93.7	231.1	715.1	8.4	18.9	64	4.9	0.0	0.0
462	14	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	22	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	63	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	43	may	fri	89.6	25.4	73.7	5.7	18.0	40	4.0	0.0	1.0
472	83	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	43	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
480	99 XY		jul month	thu dayF	93.2 FFMC	2114.45 DMC	60.0 DC	9.5 ISIt	30.2 emp	25	4.5 RH win	0.0 d rain	output
48	1 4	3	jul	thu	93.2	114.4	560.0	9.5	30.2	22	4.9	0.0	0.0
48	2 3	4	aug	sun	94.9	130.3	587.1	14.1	23.4	40	5.8	0.0	1.0
483	3 8	6	aug	sun	94.9	130.3	587.1	14.1	31.0	27	5.4	0.0	0.0
48	4 2	5	aug	sun	94.9	130.3	587.1	14.1	33.1	25	4.0	0.0	1.0
48	5 2	4	aug	mon	95.0	135.5	596.3	21.3	30.6	28	3.6	0.0	1.0
48	6 5	4	aug	tue	95.1	141.3	605.8	17.7	24.1	43	6.3	0.0	1.0
48	7 5	4	aug	tue	95.1	141.3	605.8	17.7	26.4	34	3.6	0.0	1.0
48	8 4	4	aug	tue	95.1	141.3	605.8	17.7	19.4	71	7.6	0.0	1.0
489	9 4	4	aug	wed	95.1	141.3	605.8	17.7	20.6	58	1.3	0.0	0.0
490	0 4	4	aug	wed	95.1	141.3	605.8	17.7	28.7	33	4.0	0.0	0.0
49	1 4	4	aug	thu	95.8	152.0	624.1	13.8	32.4	21	4.5	0.0	0.0
49	2 1	3	aug	fri	95.9	158.0	633.6	11.3	32.4	27	2.2	0.0	0.0
493	3 1	3	aug	fri	95.9	158.0	633.6	11.3	27.5	29	4.5	0.0	1.0
49	4 6	6	aug	sat	96.0	164.0	643.0	14.0	30.8	30	4.9	0.0	1.0
49	5 6	6	aug	mon	96.2	175.5	661.8	16.8	23.9	42	2.2	0.0	0.0
49	6 4	5	aug	mon	96.2	175.5	661.8	16.8	32.6	26	3.1	0.0	1.0
49	7 3	4	aug	tue	96.1	181.1	671.2	14.3	32.3	27	2.2	0.0	1.0
498	8 6	5	aug	tue	96.1	181.1	671.2	14.3	33.3	26	2.7	0.0	1.0
49	9 7	5	aug	tue	96.1	181.1	671.2	14.3	27.3	63	4.9	6.4	1.0
50	8 0	6	aug	tue	96.1	181.1	671.2	14.3	21.6	65	4.9	8.0	0.0
50 ⁻	1 7	5	aug	tue	96.1	181.1	671.2	14.3	21.6	65	4.9	8.0	0.0
50	2 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	3	nov	tue	79.5	3.0	106.7	1.1	11.8	31	4.5	0.0	0.0

In[]:

In [1]: import keras from keras.preprocessing.image import ImageDataGenerator

In[2]: #Define the parameters/arguments for ImageDataGeneratorclass train_datagen=ImageDataGenerator(rescale=1./255,shear_range=0.2,rotation_range=180,zoom_range

test_datagen=ImageDataGenerator(rescale=1./255)

In [3]: #Applying ImageDataGenerator functionality to trainset

x_train=train_datagen.flow_from_directory(r'C:\Users\dhine\Downloads\archive\Dataset\Dataset\ target_size=(128,128),batch_size=32, class mode='binary')

Found 436 images belonging to 2 classes.

In [4]: #Applying ImageDataGenerator functionality to testset

x_test=test_datagen.flow_from_directory(r'C:\Users\dhine\Downloads\archive\Dataset\te target_size=(128,128),batch_size=32, class_mode='binary')

Found 121 images belonging to 2 classes.

#importmodelbuilding libraries

#Todefine Linearinitialisation import Sequential from

keras.models import Sequential

#To add layers import Dense from

keras.layers import Dense

#Tocreate Convolutionkernelimport Convolution2D

fromkeras.layersimportConvolution2D

#import Maxpooling layer from

keras.layers import MaxPooling2D

#import flatten layer from keras.layers

import Flatten import warnings

warnings.filterwarnings('ignore')

In[7]:

#initializing the model model=Sequential()

In[8]:

#add convolutional layer

model.add(Convolution2D(32,(3,3),input_shape=(128,128,3),activation='relu')) #add

maxpooling layer model.add(MaxPooling2D(pool_size=(2,2)))

#add flatten layer model.add(Flatten())

In [9]: #add hidden layer
In [10] model.add(Dense(150,activation='relu')) #add output
layermodel.add(Dense(1,activation='sigmoid'))

#configure the learning process model.compile(loss='binary_crossentropy',optimizer="adam",metrics=["accuracy"])

#Training the model model.fit_generator(x_train,steps_per_epoch=14,epochs=10,validation_data=x_test,validation_st

```
Epoch 1/10
          14/14[========================]-84s6s/step-loss:4.2334-accuracy:0.5619-val_loss: 1.3686-
          val accuracy:0.5950Epoch2/10
          val_accuracy:0.8926Epoch3/10
          14/14[===============]-123s9s/step-loss:0.2231-accuracy:0.9197-val_loss: 0.1323-
          val accuracy:0.9669Epoch4/10
          14/14[========================]-75s5s/step-loss:0.2170-accuracy:0.9128-val_loss: 0.1082-
          val accuracy:0.9669Epoch5/10
          I loss: 0.1145 - val accuracy: 0.9669Epoch 6/10
          14/14[========================-1.11s8s/step-loss:0.1938-accuracy:0.9037-val loss: 0.1030 -
          val accuracy:0.9669
     Epoch14/14 [=========7/10
                                                                                      ====]
                                       -val
-88s6s/step
           -loss: 0.1756 -accuracy:0.9312
                                                   0.0831-val accuracy:0.97528/10
                                             loss:
          Epoch
     -86s
                                             6s/step-loss:0.1564-accuracy:0.9404-val
                                                                                loss:
                                                                                      ====1
          Epoch
                    0.1073-val_accuracy:0.96699/10
           ====]-77s6s/step-loss:0.1480-accuracy:0.9427-val_
                                                loss: 0.0754 - val_accuracy:0.983510/10
                                                                                        Epoch
[==============
                                      ====1
           14/14
                                             -81s6s/step
                                                        -loss: 0.1641
                                                                       -accuracy:0.9289
                                                                                        -val
            loss:
                       0.0601 - val accuracy:0.9835
          <keras.callbacks.Historyat0x2546507bf10>Out[11]:
  In[12]:
           model.save("forest1.h5")
                  load model from
                                  keras.modelfrom
  In [13]:
          keras.models import load_model #import image
          classfromkerasfromtensorflow.keras.preprocessing
          importimage
          #import numpy import
          numpy as np
          #import cv2 import
```

In [15]: #load the saved model model =
load_model("forest1.h5")

In [16]: In[17]:	img=image.load_img(r'C:\Users\dhine\Downloads\archive\Dataset\test_set\with fire\skynx=image.img_to_array(img) res = cv2.resize(x, dsize=(128, 128), interpolation=cv2.INTER_CUBIC) #expand the image shape x=np.expand_dims(res,axis=0)							
	pred=model.predict(x)							
	1/1 [===================================							
	pred							

In [16]: