

visuals_quiz

October 16, 2017

1 Exploring Data with Visuals Quiz

Use the space below to explore `powerplant_data_edited.csv` to answer the quiz questions below.

```
In [4]: # imports and load data
```

```
import pandas as pd
```

```
% matplotlib inline
```

```
df = pd.read_csv('powerplant_data_edited.csv')
```

```
df.head()
```

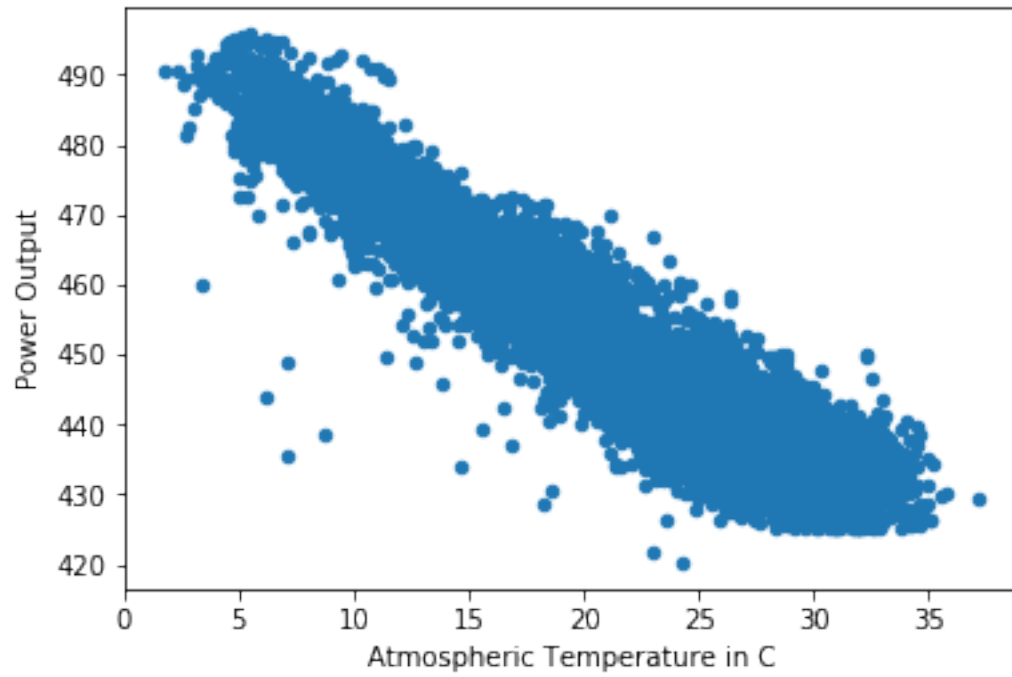
```
Out[4]:
```

	Unnamed: 0	Atmospheric Temperature in C	Exhaust Vacuum	Speed \
0	0	8.34		40.77
1	1	23.64		58.49
2	2	29.74		56.90
3	3	19.07		49.69
4	4	11.80		40.66

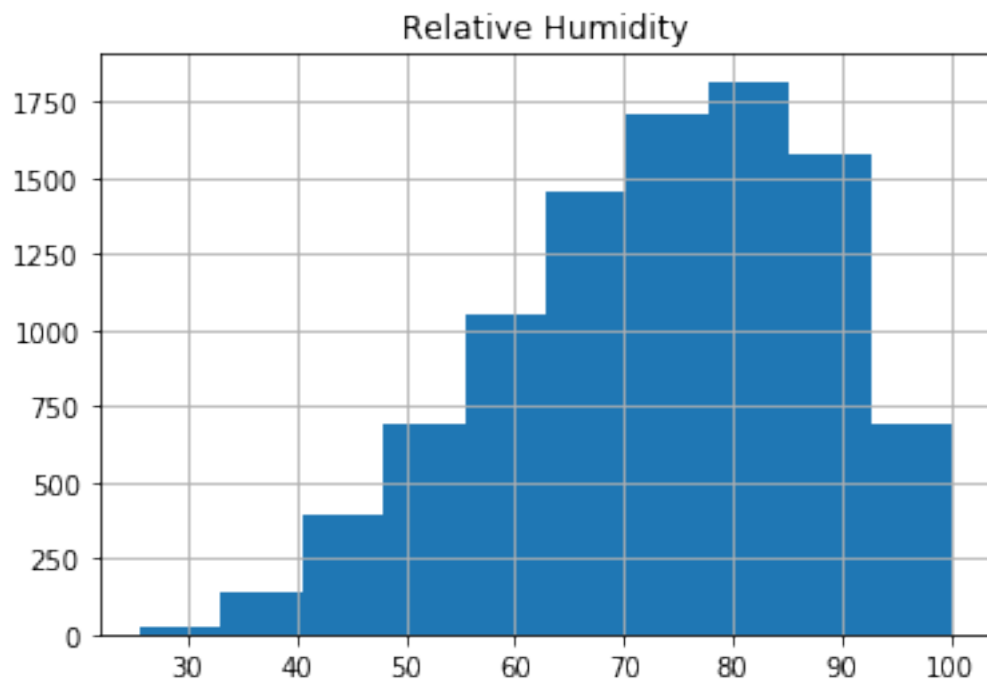
	Atmospheric Pressure	Relative Humidity	Power Output
0	1010.84	90.01	480.48
1	1011.40	74.20	445.75
2	1007.15	41.91	438.76
3	1007.22	76.79	453.09
4	1017.13	97.20	464.43

```
In [7]: # plot relationship between temperature and electrical output
```

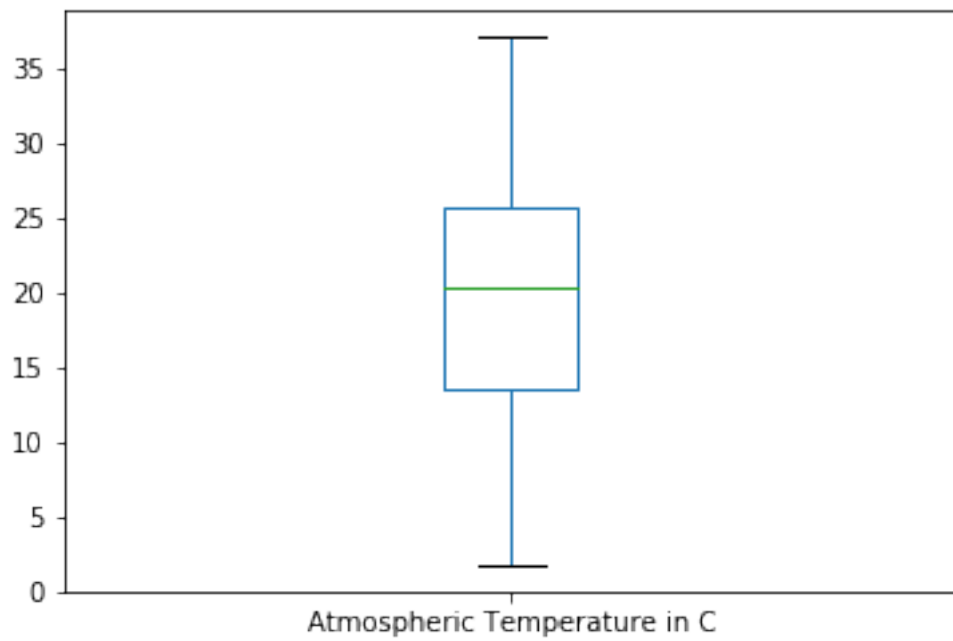
```
df.plot(x='Atmospheric Temperature in C', y='Power Output', kind='scatter');
```



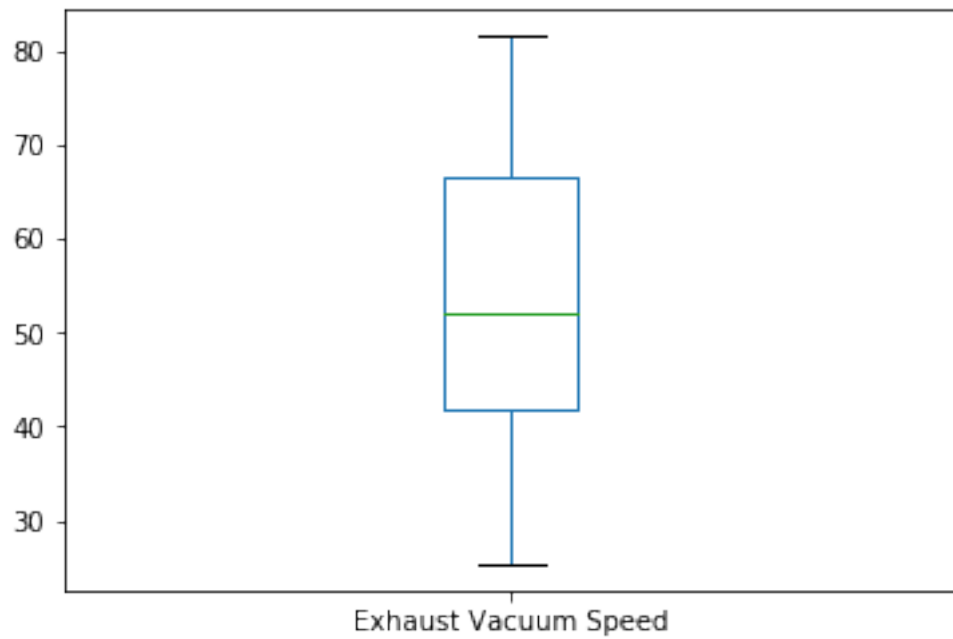
```
In [9]: # plot distribution of humidity  
df.hist('Relative Humidity');
```



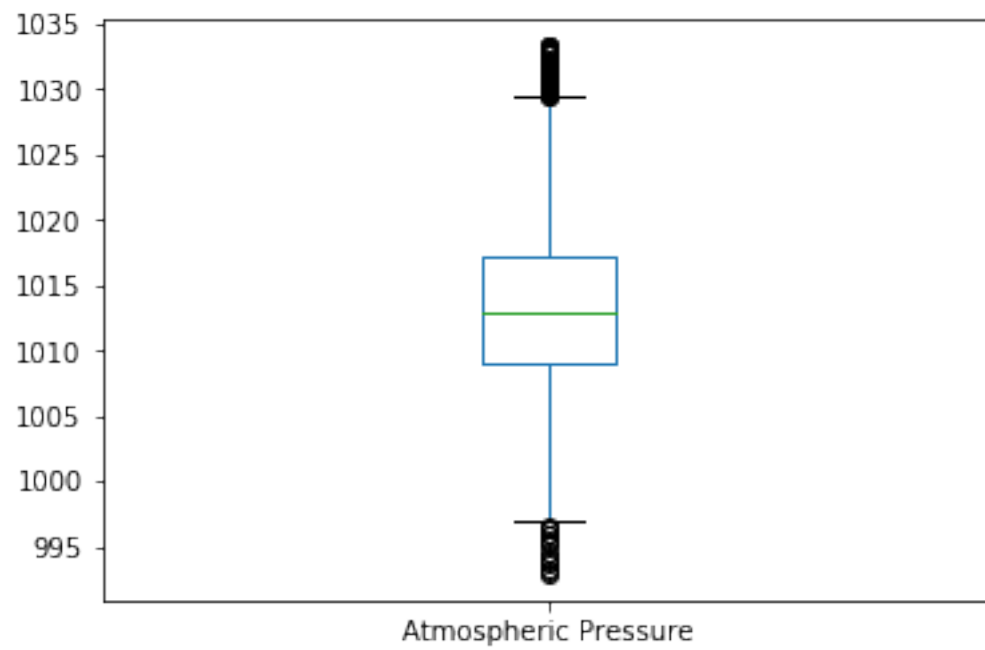
```
In [32]: # plot box plots for each variable
df['Atmospheric Temperature in C'].plot(kind='box');
```



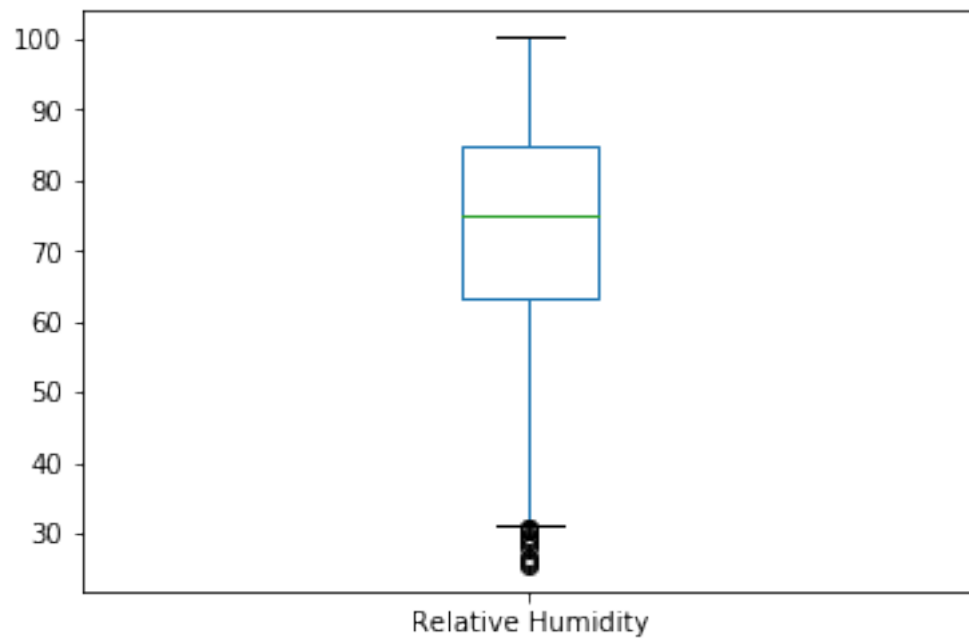
```
In [33]: df['Exhaust Vacuum Speed'].plot(kind='box');
```



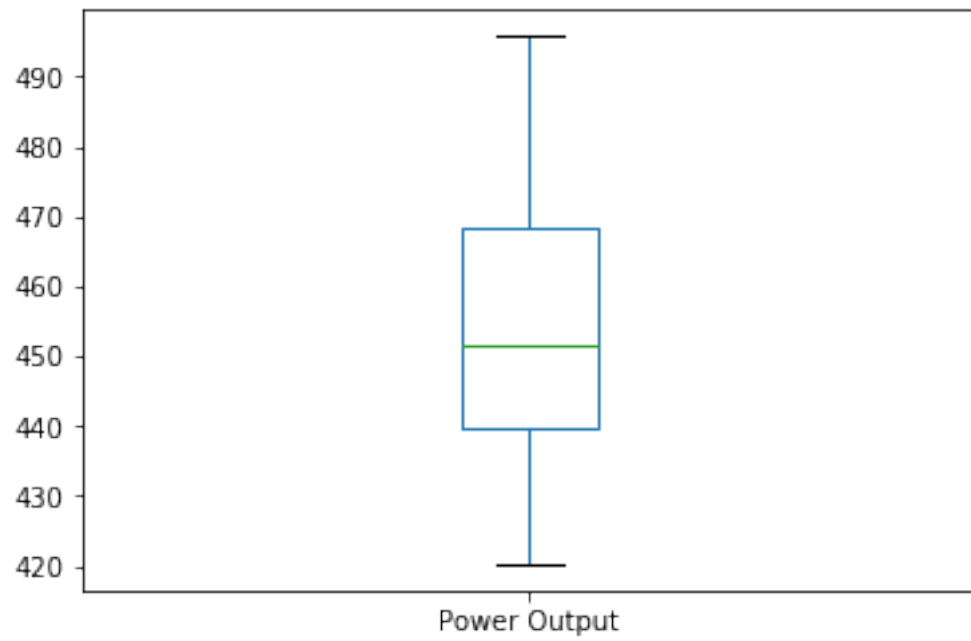
```
In [34]: df['Atmospheric Pressure'].plot(kind='box');
```



```
In [35]: df['Relative Humidity'].plot(kind='box');
```



```
In [36]: df['Power Output'].plot(kind='box');
```



```
In [ ]:
```