In [1]: import numpy as np import pandas as pd import matplotlib.pyplot as plt In [6]: data = pd.read_csv(r'C:\Users\prana\1. Weather Data.csv') Date/Time Temp_C Dew Point Temp_C Rel Hum_% Wind Speed_km/h Visibility_km Press_kPa Weather Out[6]: 1/1/2012 0:00 -1.8 -3.9 101.24 8.0 Fog 1/1/2012 1:00 -3.7 1 -1.8 87 4 8.0 101.24 Fog -3.4 7 101.26 Freezing Drizzle,Fog 2 1/1/2012 2:00 -1.8 89 4.0 1/1/2012 3:00 -3.2 101.27 Freezing Drizzle, Fog -1.5 88 6 4.0 7 4 1/1/2012 4:00 -1.5 -3.3 88 4.8 101.23 Fog **8779** 12/31/2012 19:00 0.1 -2.7 81 30 100.13 9.7 Snow 100.03 **8780** 12/31/2012 20:00 -2.4 83 24 0.2 9.7 Snow **8781** 12/31/2012 21:00 -1.5 93 28 -0.5 4.8 99.95 Snow **8782** 12/31/2012 22:00 28 -0.2 -1.8 89 9.7 99.91 Snow **8783** 12/31/2012 23:00 0.0 -2.1 86 30 11.3 99.89 Snow 8784 rows × 8 columns In [7]: ##find all the unique wind speed values in dataset data.nunique() 8784 Date/Time Out[7]: Temp_C 533 Dew Point Temp_C 489 Rel Hum_% 83 Wind Speed_km/h 34 Visibility_km 24 Press_kPa 518 Weather 50 dtype: int64 In [13]: ##find the number of times when the weather is exactly clear data.groupby('Weather').get_group('Clear') Date/Time Temp_C Dew Point Temp_C Rel Hum_% Wind Speed_km/h Visibility_km Press_kPa Weather Out[13]: 67 1/3/2012 19:00 -16.9 -24.8 50 24 25.0 101.74 Clear 114 1/5/2012 18:00 -7.1 -14.4 11 25.0 100.71 Clear 1/5/2012 19:00 61 7 100.80 -9.2 -15.4 25.0 Clear 115 9 116 1/5/2012 20:00 -9.8 -15.7 25.0 100.83 Clear 63 13 100.83 117 1/5/2012 21:00 -9.0 -14.8 25.0 Clear 12/26/2012 6:00 -13.4 -14.8 89 4 25.0 102.47 Clear 8646 **8698** 12/28/2012 10:00 -6.1 -8.6 82 19 24.1 101.27 Clear 12/29/2012 1:00 -13.6 87 11 8713 -11.9 25.0 101.31 Clear 12/29/2012 2:00 -11.8 -13.1 13 25.0 101.33 Clear 80 24 101.52 **8756** 12/30/2012 20:00 -13.8 -16.5 25.0 Clear 1326 rows × 8 columns In [14]: ## find the number of times when the speed is exactly 4 km/h data.groupby('Wind Speed_km/h').get_group(4) Out[14]: Date/Time Temp_C Dew Point Temp_C Rel Hum_% Wind Speed_km/h Visibility_km Press_kPa Weather 1/1/2012 0:00 -1.8 -3.9 101.24 Fog 8.0 1/1/2012 1:00 101.24 -1.8 -3.7 87 4 8.0 Fog 1 1/5/2012 0:00 96 -8.8 -11.7 79 4 100.32 9.7 Snow 1/5/2012 5:00 -9.5 4 100.19 101 -7.0 82 4.0 Snow 1/7/2012 2:00 -11.1 79 4 100.15 146 -8.1 19.3 Cloudy 12/31/2012 8:00 -8.6 -10.3 87 4 101.14 Snow Showers 8768 3.2 8769 12/31/2012 9:00 -8.1 -9.6 89 2.4 101.09 Snow **8770** 12/31/2012 10:00 -7.4 -8.9 89 4 6.4 101.05 Snow,Fog **8772** 12/31/2012 12:00 -5.8 -7.5 88 4 12.9 100.78 Snow **8773** 12/31/2012 13:00 -4.6 -6.6 86 4 100.63 12.9 Snow 474 rows × 8 columns In [18]: ## find all the null values in the data data.isnull().sum() data.notnull().sum() Date/Time 8784 Out[18]: Temp_C 8784 Dew Point Temp_C 8784 Rel Hum_% 8784 Wind Speed_km/h 8784 Visibility_km 8784 Press_kPa 8784 Weather 8784 dtype: int64 In [21]: ## rename the coulumn name 'Weather' of the dataframe to 'Weather Condition'. data.rename(columns = {'Weather' : 'Weather condition'}, inplace = True) data Date/Time Temp_C Dew Point Temp_C Rel Hum_% Wind Speed_km/h Visibility_km Press_kPa Weather condition Out[21]: 1/1/2012 0:00 0 -3.9 86 4 101.24 -1.8 8.0 Fog 1/1/2012 1:00 -1.8 -3.7 8.0 101.24 Fog 1/1/2012 2:00 7 -1.8 -3.4 89 4.0 101.26 Freezing Drizzle,Fog 1/1/2012 3:00 -1.5 -3.2 88 6 4.0 101.27 Freezing Drizzle,Fog -3.3 1/1/2012 4:00 7 -1.5 88 4.8 101.23 4 Fog **8779** 12/31/2012 19:00 30 100.13 0.1 -2.7 81 9.7 Snow **8780** 12/31/2012 20:00 0.2 -2.4 24 9.7 100.03 Snow -1.5 **8781** 12/31/2012 21:00 -0.5 93 28 4.8 99.95 Snow **8782** 12/31/2012 22:00 -0.2 -1.8 28 9.7 99.91 Snow **8783** 12/31/2012 23:00 -2.1 30 0.0 86 11.3 99.89 Snow 8784 rows × 8 columns In [23]: # mean of visibility data.Visibility_km.mean() 27.66444672131151 In [27]: ## standard deviation of pressure in this data data.Press_kPa.std() 0.8440047459486474 Out[27]: In [29]: ## variance of relative Humidity in this data data['Rel Hum_%'].var() 286.2485501984998 Out[29] In [35]: ## all instances when snow was recorded data[data['Weather condition'].str.contains('Snow')] Out[35]: Date/Time Temp_C Dew Point Temp_C Rel Hum_% Wind Speed_km/h Visibility_km Press_kPa Weather condition 1/2/2012 17:00 41 -2.1 -9.5 57 22 25.0 99.66 Snow Showers 1/2/2012 20:00 -5.6 -13.4 24 100.07 25.0 Snow Showers 1/2/2012 21:00 -5.8 -12.8 58 26 25.0 100.15 **Snow Showers** 1/2/2012 23:00 -7.4 -14.1 59 17 19.3 100.27 47 Snow Showers 1/3/2012 0:00 -9.0 -16.0 57 28 25.0 100.35 Snow Showers **8779** 12/31/2012 19:00 0.1 -2.7 81 30 9.7 100.13 Snow **8780** 12/31/2012 20:00 0.2 -2.4 83 24 9.7 100.03 Snow **8781** 12/31/2012 21:00 -0.5 -1.5 93 28 4.8 99.95 Snow **8782** 12/31/2012 22:00 -1.8 28 99.91 -0.2 9.7 Snow **8783** 12/31/2012 23:00 0.0 -2.1 30 11.3 99.89 Snow 583 rows × 8 columns In [39]: ## all the instances when speed is above 24 and visibility is 25 data[(data['Wind Speed_km/h']>24) & (data['Visibility_km']==25)] Date/Time Temp_C Dew Point Temp_C Rel Hum_% Wind Speed_km/h Visibility_km Press_kPa Weather condition Out[39]: 1/1/2012 23:00 23 5.3 2.0 79 30 25.0 99.31 Cloudy 1/2/2012 0:00 5.2 1.5 77 35 99.26 24 25.0 Rain Showers 39 25 1/2/2012 1:00 4.6 0.0 72 25.0 99.26 Cloudy 1/2/2012 2:00 71 32 Mostly Cloudy 26 3.9 -0.9 25.0 99.26 1/2/2012 3:00 33 27 3.7 -1.5 69 25.0 99.30 Mostly Cloudy **8705** 12/28/2012 17:00 -8.6 -12.0 76 26 25.0 101.34 Mainly Clear **8753** 12/30/2012 17:00 -15.8 74 28 Mainly Clear -12.1 25.0 101.26 **8755** 12/30/2012 19:00 -13.4 -16.5 77 26 25.0 101.47 Mainly Clear **8759** 12/30/2012 23:00 28 101.52 Mostly Cloudy -12.1 -15.1 78 25.0 **8760** 12/31/2012 0:00 -14.4 77 26 -11.1 25.0 101.51 Cloudy 308 rows × 8 columns In [40]: ## mean value of each column against 'Weather COndition' data.head(2) **0** 1/1/2012 0:00 101.24 Fog -1.8 -3.9 8.0 **1** 1/1/2012 1:00 -1.8 -3.7 8.0 101.24 Fog In [41]: data.groupby('Weather condition').mean() Temp_C Dew Point Temp_C Rel Hum_% Wind Speed_km/h Visibility_km Press_kPa Out[41]: Weather condition 6.825716 10.557315 30.153243 101.587443 Clear 0.089367 64.497738 Cloudy 7.970544 2.375810 69.592593 16.127315 26.625752 100.911441 16.097561 17.931707 100.435366 Drizzle 7.353659 5.504878 88.243902 Drizzle,Fog 8.067500 7.033750 93.275000 11.862500 5.257500 100.786625 -0.700000 92.000000 20.000000 4.000000 100.790000 Drizzle,Ice Pellets,Fog 0.400000 Drizzle,Snow 1.050000 0.150000 93.500000 14.000000 10.500000 100.890000 15.533333 Drizzle,Snow,Fog 0.693333 0.120000 95.866667 5.513333 99.281333 Fog 4.303333 3.159333 92.286667 7.946667 6.248000 101.184067 Freezing Drizzle -5.657143 -8.000000 83.571429 16.571429 9.200000 100.202857 Freezing Drizzle,Fog -2.533333 -4.183333 88.500000 17.000000 5.266667 100.441667 -8.000000 10.333333 Freezing Drizzle,Haze -5.433333 82.000000 2.666667 100.316667 Freezing Drizzle, Snow -5.109091 -7.072727 86.090909 16.272727 5.872727 100.520909 4.750000 0.650000 102.320000 Freezing Fog -7.575000 -9.250000 87.750000 Freezing Rain -3.885714 -6.078571 84.642857 19.214286 8.242857 99.647143 15.500000 Freezing Rain,Fog -2.225000 -3.750000 89.500000 7.550000 99.945000 Freezing Rain, Haze -4.900000 -7.450000 82.500000 7.500000 2.400000 100.375000 Freezing Rain,Ice Pellets,Fog -3.700000 28.000000 8.000000 100.950000 -2.600000 92.000000 Freezing Rain, Snow Grains -5.000000 -7.300000 84.000000 32.000000 4.800000 98.560000 7.831250 101.482500 -0.200000 -2.975000 81.625000 10.437500 Haze **Mainly Clear** 12.558927 4.581671 60.667142 14.144824 34.264862 101.248832 94.000000 17.000000 6.400000 99.980000 Moderate Rain,Fog 1.700000 0.800000 **Moderate Snow** -5.525000 -7.250000 87.750000 33.750000 0.750000 100.275000 Moderate Snow,Blowing Snow -5.450000 -6.500000 92.500000 40.000000 0.600000 100.570000 Mostly Cloudy 10.574287 3.131174 62.102465 15.813920 31.253842 101.025288 7.042810 83.624183 19.254902 18.856536 100.233333 9.786275 Rain **Rain Showers** 13.722340 9.187766 75.159574 17.132979 22.816489 100.404043 12.100000 13.000000 6.400000 99.830000 Rain Showers,Fog 12.800000 96.000000 Rain Showers, Snow Showers 2.150000 -1.500000 76.500000 22.500000 21.700000 101.100000 8.273276 7.219828 93.189655 14.793103 6.873276 100.500862 Rain,Fog 11.666667 Rain, Haze 4.633333 2.066667 83.333333 6.700000 100.540000 Rain,Ice Pellets 24.000000 0.600000 -0.600000 92.000000 9.700000 100.120000 Rain, Snow 1.055556 -0.566667 89.000000 28.388889 11.672222 99.951111 -2.100000 26.000000 25.000000 100.600000 **Rain, Snow Grains** 1.900000 75.000000 Rain, Snow, Fog 0.800000 0.300000 96.000000 9.000000 6.400000 100.730000 91.500000 23.250000 6.000000 100.105000 Rain, Snow, Ice Pellets 1.100000 -0.175000 -4.524103 -7.623333 79.307692 20.038462 11.171795 100.536103 Snow **Snow Pellets** 59.000000 35.000000 2.400000 99.700000 0.700000 -6.400000 **Snow Showers** -3.506667 -7.866667 72.350000 19.233333 20.158333 100.963500 Snow Showers,Fog -10.675000 -11.900000 90.750000 13.750000 7.025000 101.292500 Snow,Blowing Snow -5.410526 -7.621053 84.473684 34.842105 4.105263 99.704737 -5.075676 -6.364865 90.675676 17.324324 4.537838 100.688649 Snow,Fog -4.020000 Snow,Haze -6.860000 80.600000 5.000000 4.640000 100.782000 87.666667 23.833333 Snow,Ice Pellets -1.883333 -3.666667 7.416667 100.548333 Thunderstorms 24.150000 19.750000 77.000000 7.500000 24.550000 100.230000 Thunderstorms, Heavy Rain Showers 10.900000 9.000000 2.400000 100.260000 9.000000 88.000000 Thunderstorms, Moderate Rain Showers, Fog 19.600000 18.500000 93.000000 15.000000 3.200000 100.010000 Thunderstorms, Rain 20.433333 18.533333 15.666667 19.833333 100.420000 89.000000 Thunderstorms, Rain Showers 20.037500 15.893750 100.233750 17.618750 86.375000 18.312500 Thunderstorms, Rain Showers, Fog 21.600000 18.700000 84.000000 19.666667 9.700000 100.063333 19.000000 Thunderstorms, Rain, Fog 20.600000 18.600000 88.000000 4.800000 100.080000 In [44]: ## What is the Minimum & Maximum value of each column against each 'Weather Condition data.groupby('Weather condition').max() Date/Time Temp_C Dew Point Temp_C Rel Hum_% Wind Speed_km/h Visibility_km Press_kPa Out[44]: Weather condition 9/9/2012 5:00 32.8 20.4 99 33 48.3 103.63 Clear Cloudy 9/9/2012 23:00 30.5 22.6 99 54 48.3 103.65 9/30/2012 3:00 17.7 96 30 25.0 101.56 Drizzle 18.8 Drizzle,Fog 9/30/2012 2:00 19.1 28 19.9 100 9.7 102.07 Drizzle,Ice Pellets,Fog 12/17/2012 9:00 -0.7 92 20 100.79 0.4 4.0 19 11.3 **Drizzle, Snow** 12/19/2012 18:00 1.2 0.2 95 101.15 Drizzle,Snow,Fog 12/22/2012 3:00 1.1 0.6 98 32 9.7 100.15 9/22/2012 0:00 20.8 19.6 100 22 9.7 103.04 Fog 26 **Freezing Drizzle** 2/1/2012 5:00 -3.3 93 12.9 101.02 -2.3 Freezing Drizzle,Fog 33 12/10/2012 5:00 -0.3 -2.3 94 8.0 101.27 2/1/2012 13:00 -7.7 83 11 4.0 100.36 Freezing Drizzle, Haze -5.0 3/2/2012 12:00 24 12.9 Freezing Drizzle, Snow -3.3 -4.6 94 101.18 3/17/2012 6:00 -0.3 99 9 102.85 **Freezing Fog** -0.1 8.0 28 Freezing Rain 2/1/2012 7:00 0.3 -1.7 92 16.1 101.00 12/17/2012 1:00 26 101.01 Freezing Rain,Fog 0.1 -0.9 93 9.7 Freezing Rain, Haze 2/1/2012 15:00 -4.9 -7.4 83 9 2.8 100.41 28 Freezing Rain, Ice Pellets, Fog 12/17/2012 3:00 -2.6 -3.7 92 8.0 100.95 Freezing Rain, Snow Grains 1/13/2012 9:00 -5.0 -7.3 84 32 4.8 98.56 17 3/13/2012 23:00 11.1 86 9.7 102.97 Haze 14.1 63 48.3 **Mainly Clear** 9/9/2012 9:00 33.0 21.2 99 103.59 Moderate Rain, Fog 12/10/2012 8:00 8.0 94 17 99.98 1.7 6.4 39 **Moderate Snow** 12/27/2012 9:00 -4.9 -6.7 93 8.0 100.67 Moderate Snow, Blowing Snow 12/27/2012 12:00 93 41 100.64 -5.4 -6.4 0.6 9/9/2012 2:00 83 **Mostly Cloudy** 32.4 24.4 100 48.3 103.65 52 9/5/2012 2:00 20.4 99 48.3 102.26 Rain 22.8 41 **Rain Showers** 9/8/2012 16:00 26.4 23.0 97 48.3 102.31 Rain Showers,Fog 10/20/2012 3:00 12.8 12.1 96 13 6.4 99.83 Rain Showers, Snow Showers 12/5/2012 10:00 2.2 -1.2 78 28 24.1 101.11 9/30/2012 23:00 21.7 19.5 100 46 9.7 101.77 Rain,Fog 9.7 100.61 **Rain, Ice Pellets** 12/18/2012 5:00 0.6 -0.6 24 9.7 100.12 Rain, Snow 4/23/2012 3:00 1.7 0.5 94 52 25.0 101.07 Rain, Snow Grains 12/21/2012 0:00 -2.1 75 26 25.0 100.60 1.9 Rain,Snow,Fog 12/8/2012 21:00 8.0 0.3 96 9 6.4 100.73 Rain, Snow, Ice Pellets 94 28 100.47 12/21/2012 5:00 1.3 0.1 6.4 3.7 57 4/27/2012 9:00 0.3 96 25.0 102.73 Snow **Snow Pellets** 11/24/2012 15:00 0.7 -6.4 59 35 2.4 99.70 **Snow Showers** 3/4/2012 21:00 2.9 -0.7 94 37 48.3 102.50 22 102.52 Snow Showers,Fog 12/29/2012 13:00 -10.0 -11.1 92 9.7 48 **Snow,Blowing Snow** 2/25/2012 9:00 -2.9 91 9.7 100.62 -1.4 3/14/2012 19:00 8.0 99 35 102.07 Snow,Fog 1.1 9.7 -3.6 15 Snow,Haze 2/1/2012 21:00 -6.4 81 6.4 100.99 3/3/2012 4:00 92 33 11.3 100.96 **Snow,Ice Pellets** 8.0 -1.7 15 **Thunderstorms** 7/4/2012 16:00 20.1 87 25.0 100.62 26.7 5/29/2012 6:00 88 9 100.26 Thunderstorms, Heavy Rain Showers 10.9 9.0 2.4 15 Thunderstorms, Moderate Rain Showers, Fog 7/17/2012 6:00 19.6 18.5 93 3.2 100.01 Thunderstorms,Rain 7/23/2012 18:00 21.3 19.1 93 30 24.1 100.83 Thunderstorms, Rain Showers 9/8/2012 4:00 23.1 98 32 25.0 101.06 25.5 7/31/2012 20:00 21.3 91 35 100.64 Thunderstorms, Rain Showers, Fog 22.9 9.7 Thunderstorms, Rain, Fog 19 7/17/2012 5:00 20.6 18.6 88 4.8 100.08 In [45]: data.groupby('Weather condition').min() Out[45]: Date/Time Temp_C Dew Point Temp_C Rel Hum_% Wind Speed_km/h Visibility_km Press_kPa Weather condition 1/11/2012 1:00 -23.3 -28.5 20 0 11.3 99.52 Clear Cloudy 1/1/2012 17:00 -21.4 -26.8 18 0 11.3 98.39 Drizzle 1/23/2012 21:00 1.1 -0.2 74 0 6.4 97.84 Drizzle,Fog 1/23/2012 20:00 0.0 -1.6 85 0 1.0 98.65 12/17/2012 9:00 Drizzle,Ice Pellets,Fog 92 20 100.79 0.4 -0.7 4.0 **Drizzle,Snow** 12/17/2012 15:00 0.9 0.1 92 9 9.7 100.63 92 7 **Drizzle,Snow,Fog** 12/18/2012 21:00 0.3 -0.1 2.4 97.79 -16.0 0 Fog 1/1/2012 0:00 -17.2 80 0.2 98.31 **Freezing Drizzle** 1/13/2012 10:00 -12.2 78 6 4.8 -9.0 98.44 Freezing Drizzle,Fog 1/1/2012 2:00 -9.0 82 6 3.6 98.74 -6.4 2/1/2012 11:00 81 9 2.0 100.28 Freezing Drizzle, Haze -5.8 -8.3 Freezing Drizzle, Snow 1/13/2012 3:00 -8.3 -10.4 79 6 2.4 99.19 **Freezing Fog** 1/22/2012 6:00 -19.0 -22.9 71 0 0.2 101.97 Freezing Rain 1/13/2012 11:00 -6.5 -9.0 81 7 2.8 98.22 7 Freezing Rain,Fog 1/17/2012 23:00 -6.1 -8.7 82 2.8 98.32 Freezing Rain, Haze 2/1/2012 14:00 -4.9 -7.5 82 6 2.0 100.34 28 Freezing Rain, Ice Pellets, Fog 12/17/2012 3:00 -3.7 92 8.0 100.95 -2.6 32 Freezing Rain, Snow Grains 1/13/2012 9:00 -5.0 -7.3 84 4.8 98.56 0 100.35 Haze 1/22/2012 12:00 -11.5 -16.0 68 4.8 0 Mainly Clear 1/10/2012 11:00 -22.8 -28.0 20 12.9 98.67 Moderate Rain,Fog 12/10/2012 8:00 1.7 8.0 94 17 99.98 6.4 **Moderate Snow** 1/12/2012 15:00 -6.3 -7.6 83 26 0.6 99.88 Moderate Snow, Blowing Snow 12/27/2012 10:00 -5.5 -6.6 92 39 0.6 100.50 **Mostly Cloudy** 1/1/2012 16:00 -23.2 -28.5 0 11.3 98.36 18 40 0 Rain 1/1/2012 18:00 0.3 -5.7 4.0 97.52 1/1/2012 22:00 1.6 -7.2 37 0 6.4 98.51 **Rain Showers** 12.1 96 13 Rain Showers,Fog 10/20/2012 3:00 12.8 6.4 99.83 Rain Showers, Snow Showers 11/4/2012 8:00 2.1 -1.8 75 17 19.3 101.09 0 Rain,Fog 1/23/2012 18:00 0.0 -1.2 83 2.0 98.61 7 Rain,Haze 3/13/2012 7:00 4.0 1.0 81 4.0 100.50 24 Rain,Ice Pellets 12/18/2012 5:00 0.6 -0.6 92 9.7 100.12 13 Rain, Snow 1/10/2012 5:00 0.6 -1.7 81 2.4 98.18 Rain, Snow Grains 12/21/2012 0:00 1.9 -2.1 75 26 25.0 100.60 Rain,Snow,Fog 12/8/2012 21:00 8.0 0.3 96 9 100.73 6.4 17 Rain,Snow,Ice Pellets 12/21/2012 1:00 0.9 -0.7 88 4.8 99.85 0 1/10/2012 1:00 -24.6 41 1.0 97.75 Snow -16.7 **Snow Pellets** 11/24/2012 15:00 0.7 -6.4 59 35 2.4 99.70 0 **Snow Showers** 1/12/2012 7:00 -13.3 -19.3 52 2.4 99.49 7 Snow Showers, Fog 12/26/2012 9:00 -11.3 -12.7 89 4.0 100.63 24 Snow,Blowing Snow 1/13/2012 21:00 -12.0 -16.2 70 0.6 98.11 -12.0 77 4 **Snow,Fog** 12/16/2012 15:00 -10.1 1.2 99.38 Snow,Haze 2/1/2012 17:00 -4.3 -7.2 80 0 4.0 100.61 Snow,Ice Pellets 12/10/2012 3:00 -4.3 -5.9 76 19 2.8 99.40 **Thunderstorms** 7/16/2012 1:00 21.6 19.4 67 0 24.1 99.84 5/29/2012 6:00 9 Thunderstorms, Heavy Rain Showers 10.9 9.0 88 2.4 100.26 15 Thunderstorms, Moderate Rain Showers, Fog 7/17/2012 6:00 19.6 18.5 93 3.2 100.01 5/25/2012 20:00 Thunderstorms,Rain 19.4 18.2 83 4 16.1 100.19 Thunderstorms, Rain Showers 5/29/2012 16:00 11.0 7.0 68 7 6.4 99.65 7 Thunderstorms, Rain Showers, Fog 6/29/2012 3:00 19.5 16.1 80 9.7 99.71 19 7/17/2012 5:00 18.6 88 4.8 100.08 Thunderstorms, Rain, Fog 20.6 In []: