



Government of Nepal
Ministry of Forest and Environment
Department of Environment
Babarmahal, Kathmandu

Air quality status of Nepal 2016-2020

Volume X

**Pokhara University, Pokhara air quality monitoring
station**



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1. Pokhara University, Pokhara Air Quality Monitoring Station

- Address : Pokhara University, Pokhara
- Location: 28.143122 latitude, 84.08551 longitude
- Surrounding of the station
 - North: Open area of Pokhara university
 - South: Open area of Pokhara university
 - East: Open area of Pokhara university
 - West: Open area of Pokhara university
- Establish year: 2017 (2074)
- Brief introduction of the instruments installed in the station
 1. PM instrument- GRIMM EDM 180
 2. Met sensor luffth WS 700
 3. Data logging and data transmission and power backup system

2. Air Quality Status of Dhulikhel station (2017-2020)

2.1. Air quality status, 2017

2.1.1. Temporal variation of PM₁

Annual average of PM₁

Histogram of hourly average PM₁ is shown in the figure below.

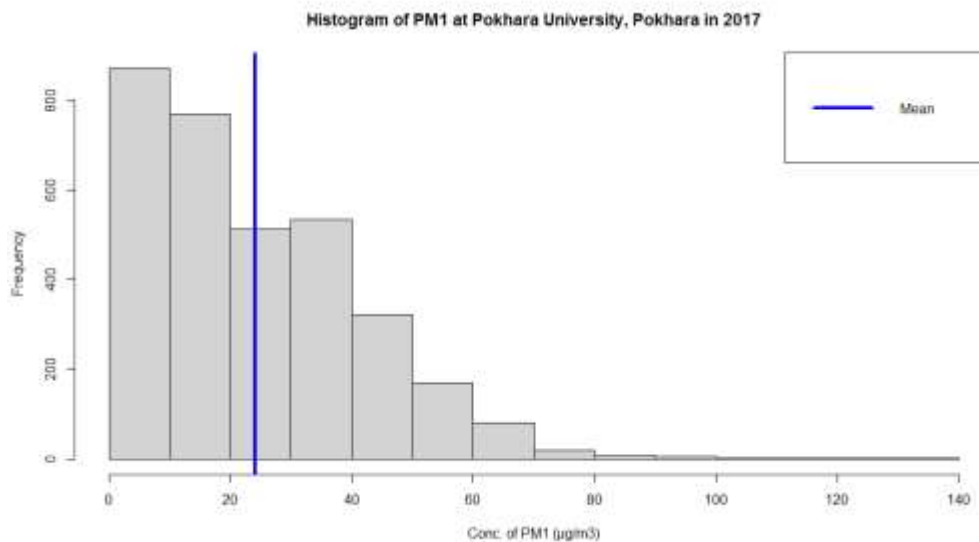


Figure 1 : Histogram of PM₁.

Daily average of PM₁:

Daily average concentration of PM₁ was high during December and was found low during August.

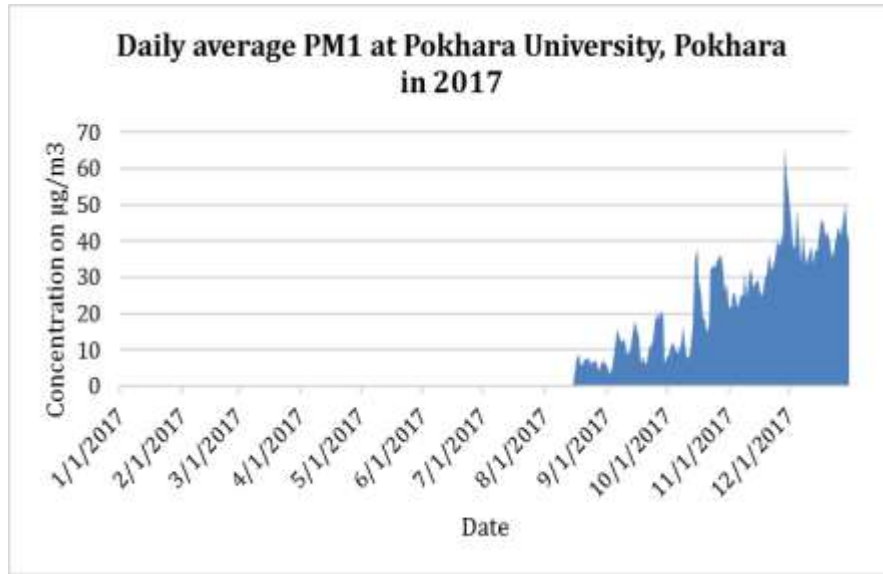


Figure 2: Daily average of PM₁

Monthly average of PM₁

The highest and the lowest concentration of PM₁ was found during December and August respectively. The mean value for those months were found to be 40.96 and 6.58 µg/m³ respectively.

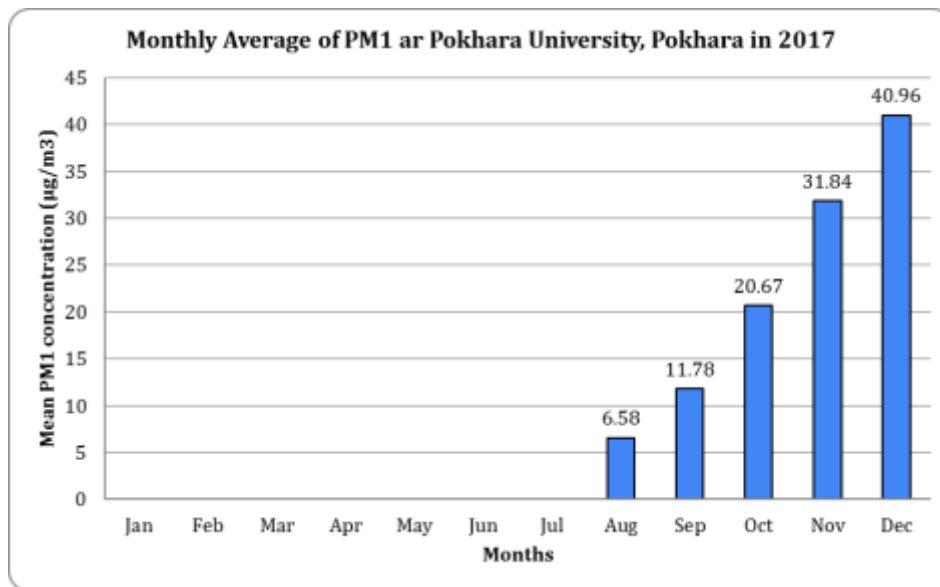


Figure 3: Monthly Average of PM₁

Monthly variation of PM₁

Variation in concentration of PM₁ was found more during December whereas low during August.

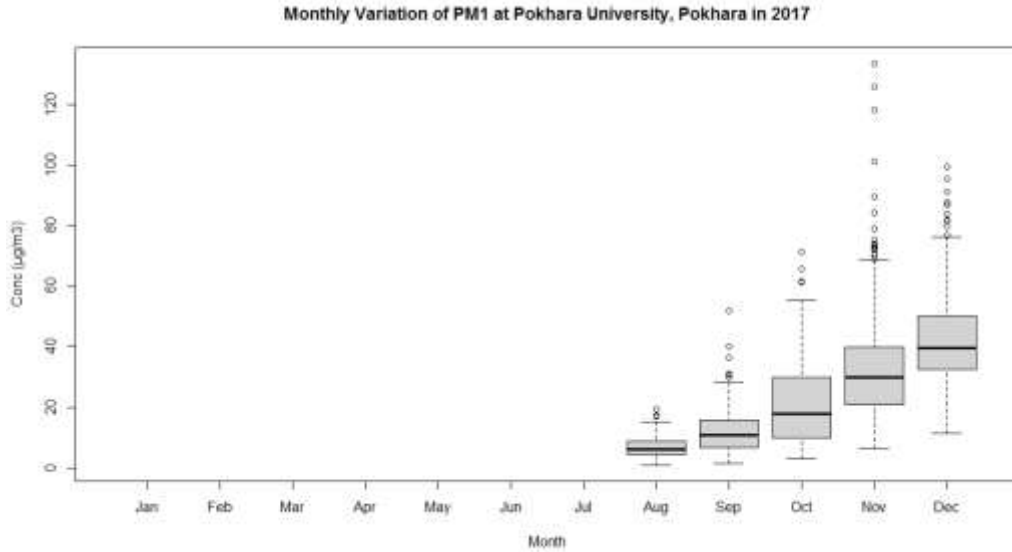


Figure 4: Monthly Variation of PM₁

Diurnal variation of average PM₁

The diurnal variation of average PM₁ concentrations can be shown in the figure below. The variation in PM₁ concentration was high at around 6 pm and low at 1-2 pm.

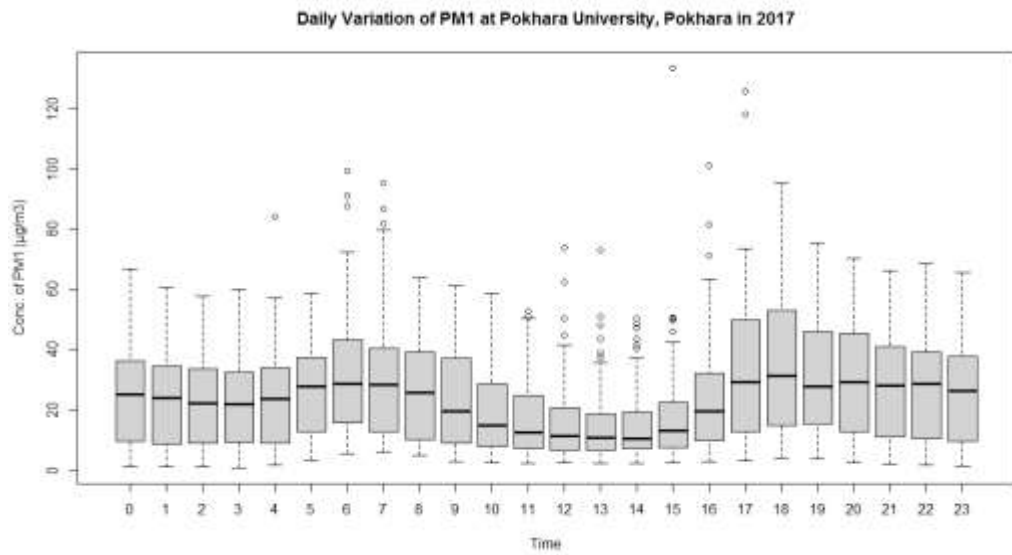


Figure 5: Diurnal variation of PM₁

2.1.2. Temporal variation of PM_{2.5}

Annual average of PM_{2.5}

Histogram of hourly average PM_{2.5} is shown in the figure below.

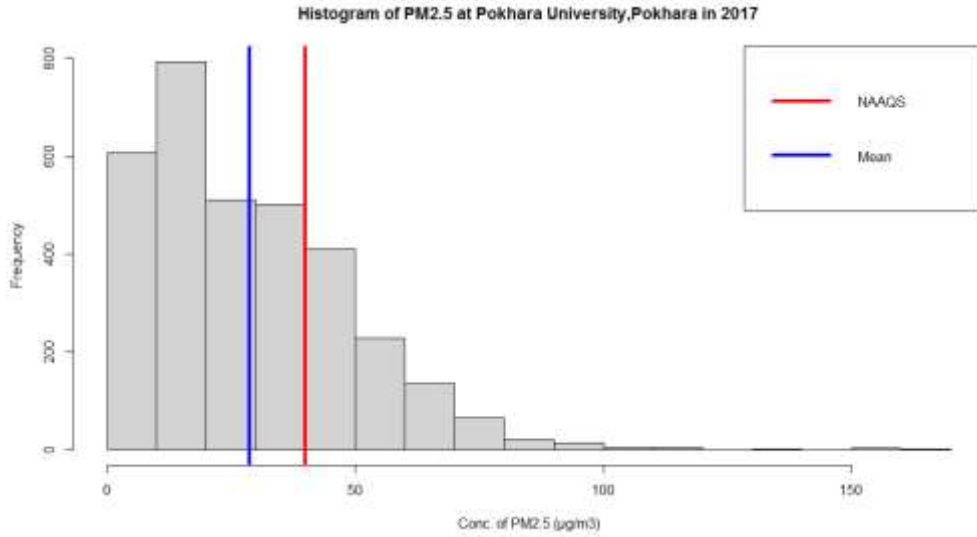


Figure 6 : Histogram of PM_{2.5}

Daily average of PM_{2.5}

Daily average concentration of PM_{2.5} was high during December and was found low during August.

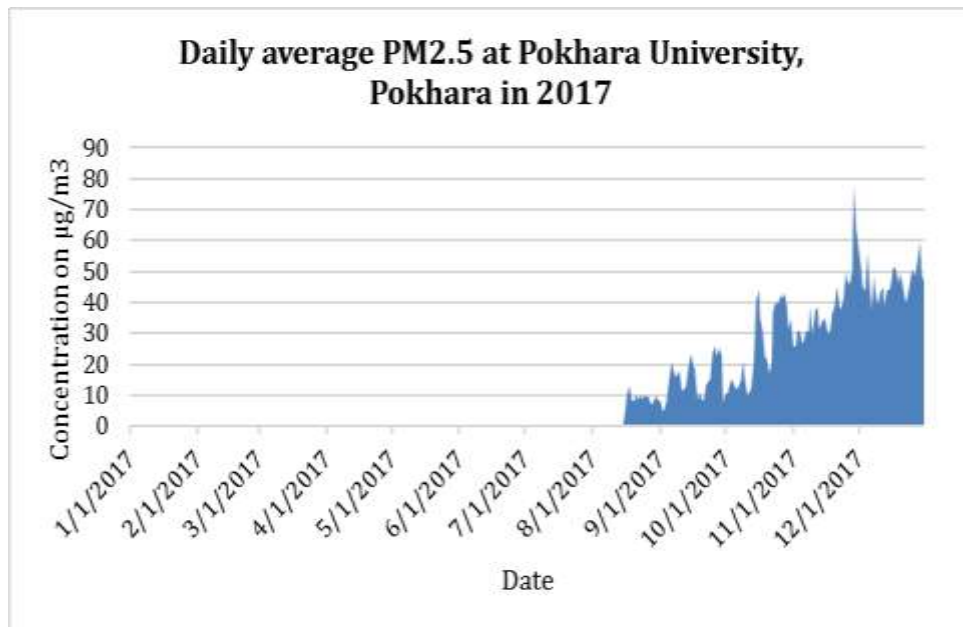


Figure 7: Daily average of PM_{2.5}

Monthly average of PM_{2.5}

The highest and the lowest concentration of PM_{2.5} was found during December and August respectively. The mean value for those months were found to be 46.96 and 9.04 $\mu\text{g}/\text{m}^3$ respectively.

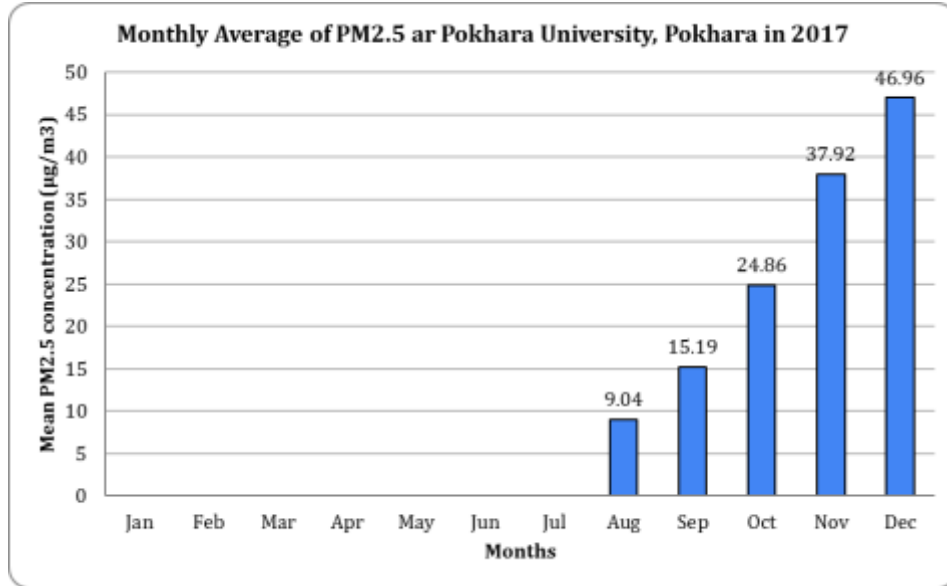


Figure 8: Monthly Average of PM_{2.5}

Monthly variation of PM_{2.5}

Variation in concentration of PM_{2.5} was found more during December whereas low during August.

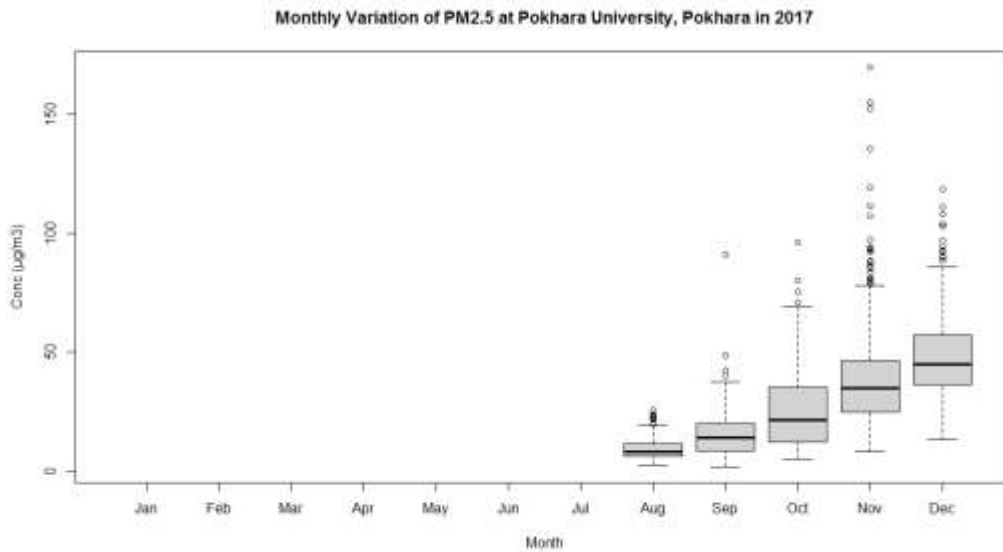


Figure 9: Monthly Variation of PM_{2.5}

Diurnal variation of average PM_{2.5}

The diurnal variation of average PM_{2.5} concentrations can be shown in the figure below. The variation in PM_{2.5} concentrations was high at around 5 pm and low at 2 am.

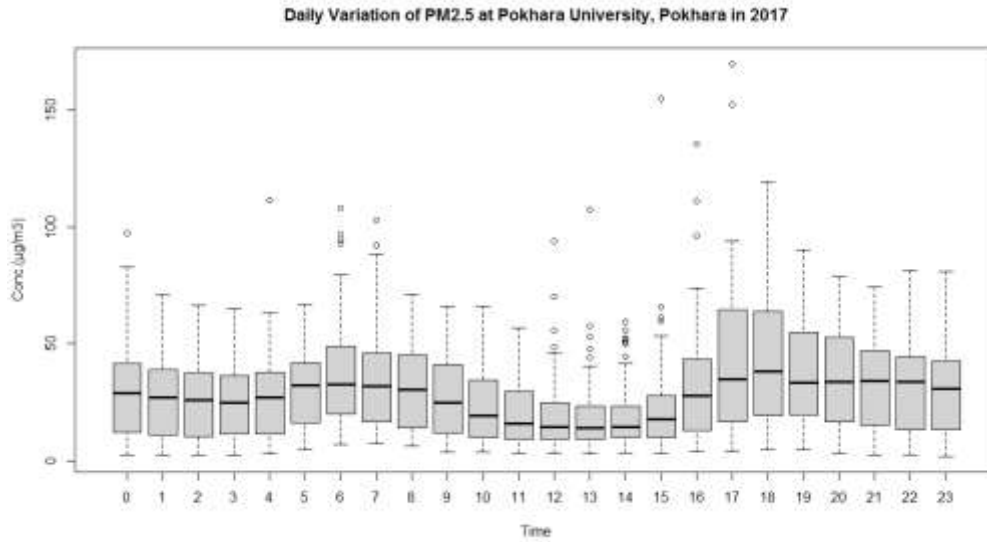


Figure 10: Diurnal variation of PM_{2.5}

Compliance status of PM_{2.5}

The total days of PM_{2.5} monitored in the year 2017 counts 138, of which 42 days exceed the NAAQS guideline.

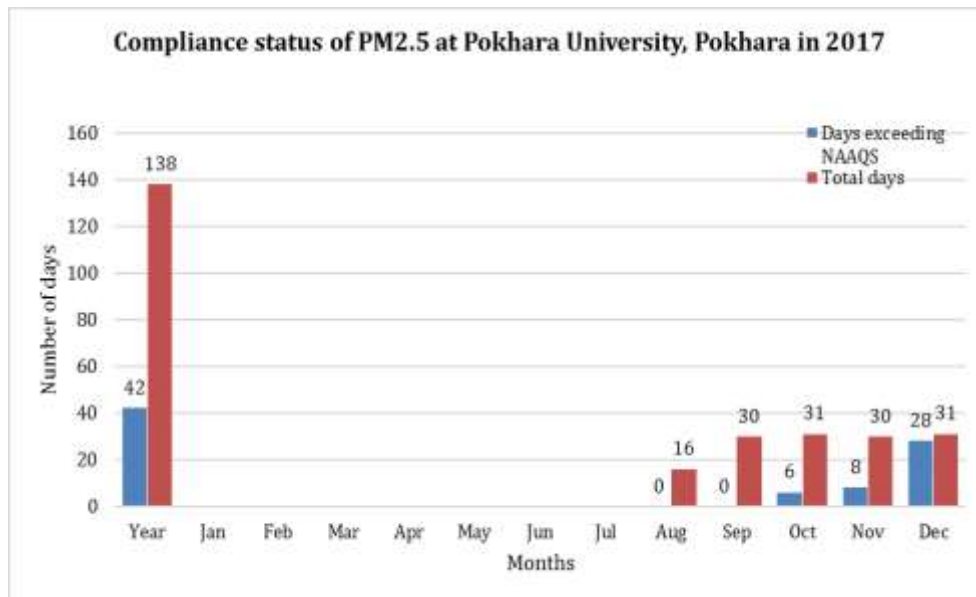


Figure 11: Compliance status of PM_{2.5}

2.1.3. Temporal variation of PM₁₀

Annual average of PM₁₀

Histogram of hourly average PM₁₀ is shown in the figure below.

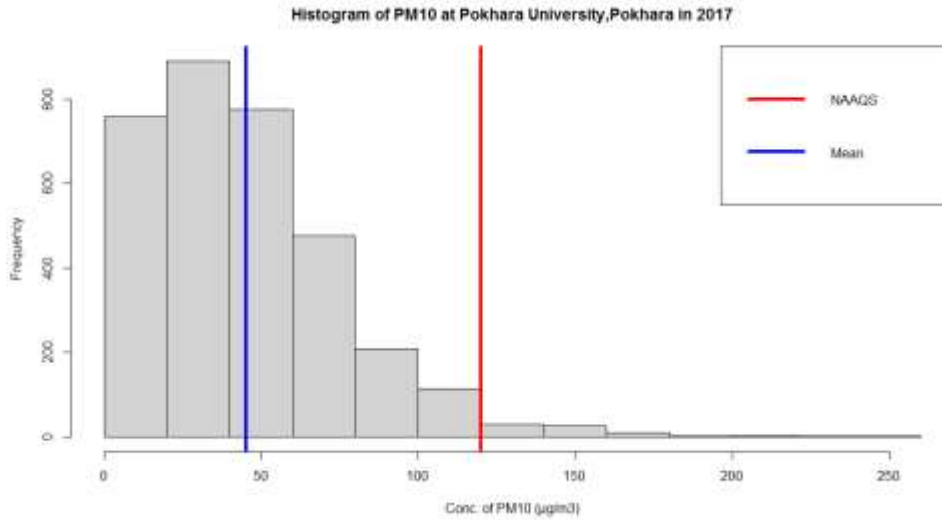


Figure 12 : Histogram for the ambient concentration of PM₁₀.

Daily average of PM₁₀

Daily average concentration of PM₁₀ was high during December and was found low during August.

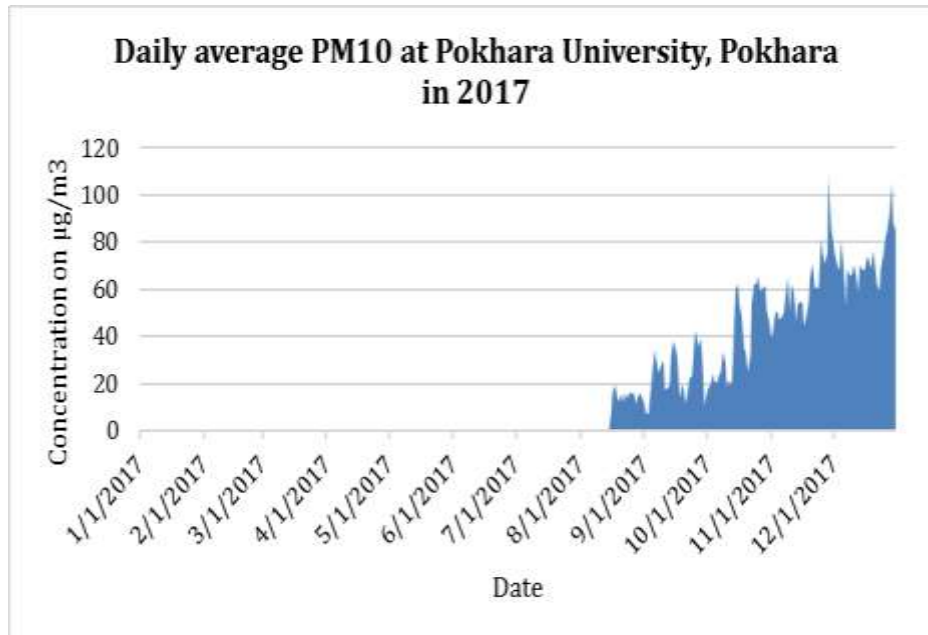


Figure 13: Daily average of PM₁₀

Monthly average of PM₁₀

The highest and the lowest concentration of PM₁₀ was found during December and August respectively. The mean value for those months were found to be 73.11 and 14.52 $\mu\text{g}/\text{m}^3$ respectively.

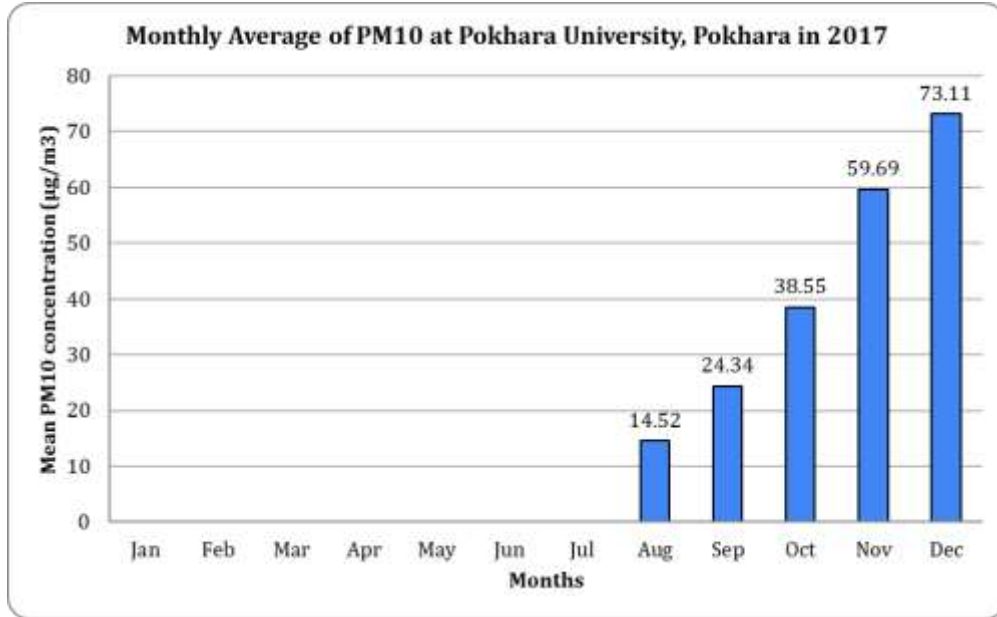


Figure 14: Monthly average of Pm₁₀

Monthly variation of PM₁₀

Variation in concentration of PM₁₀ was found more during December and low during August.

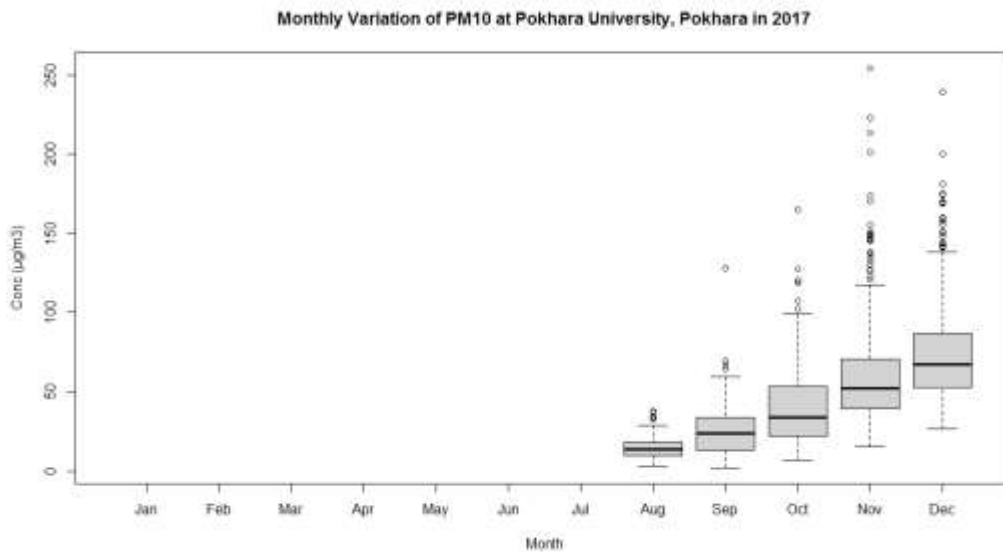


Figure 15: Monthly Variation of PM₁₀

Diurnal variation of average PM₁₀ concentration

The diurnal variation of average PM₁₀ concentrations can be shown in the figure below. The variation in PM₁₀ concentration was high at around 5 pm and low at 1 pm.

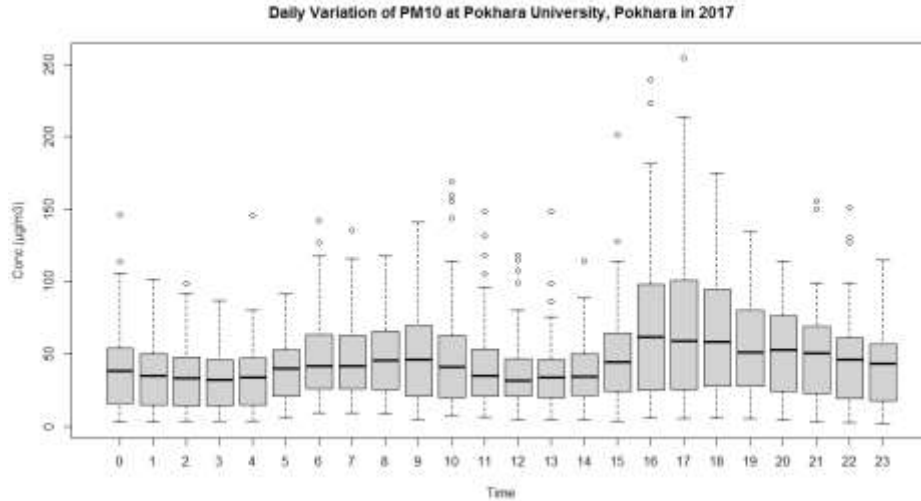


Figure 16: Diurnal variation of PM₁₀ concentration

Compliance status of PM₁₀

The total days of PM₁₀ monitored in the year 2017 counts 138 of which none of the days exceed the NAAQS guideline.

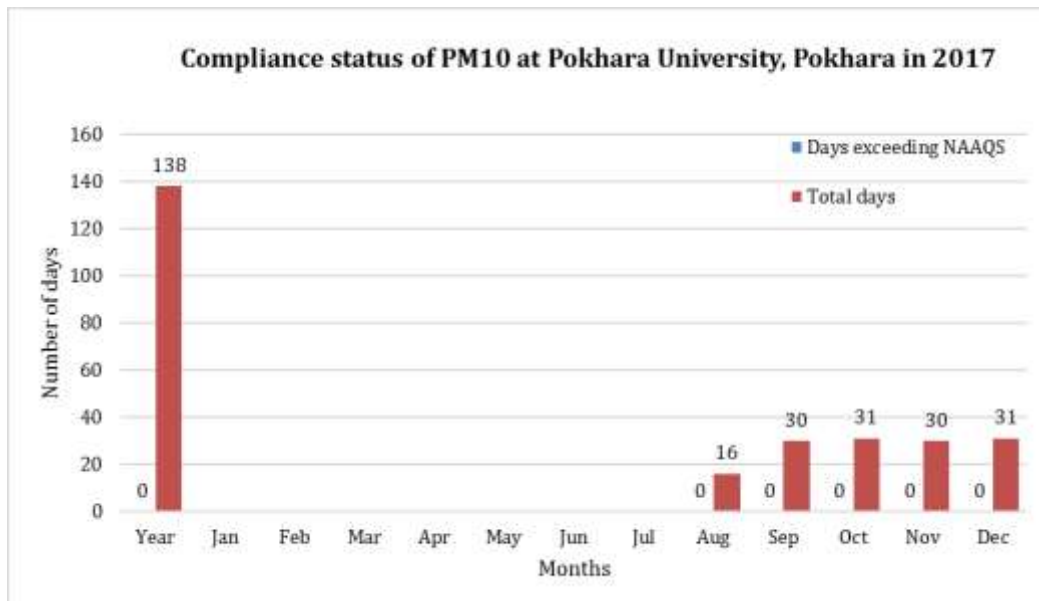


Figure 17: Compliance status of PM₁₀

2.1.4. Temporal variation of TSP

Annual average of TSP

Histogram of hourly average TSP is shown in the figure below.

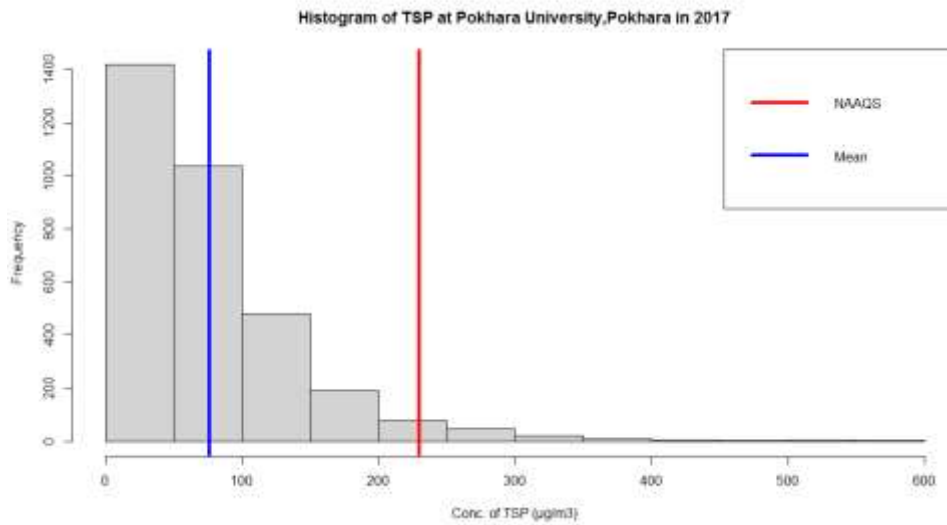


Figure 18 : Histogram for the ambient concentration of TSP

Daily average of TSP

Daily average concentration of TSP was high during December and was found low during August.

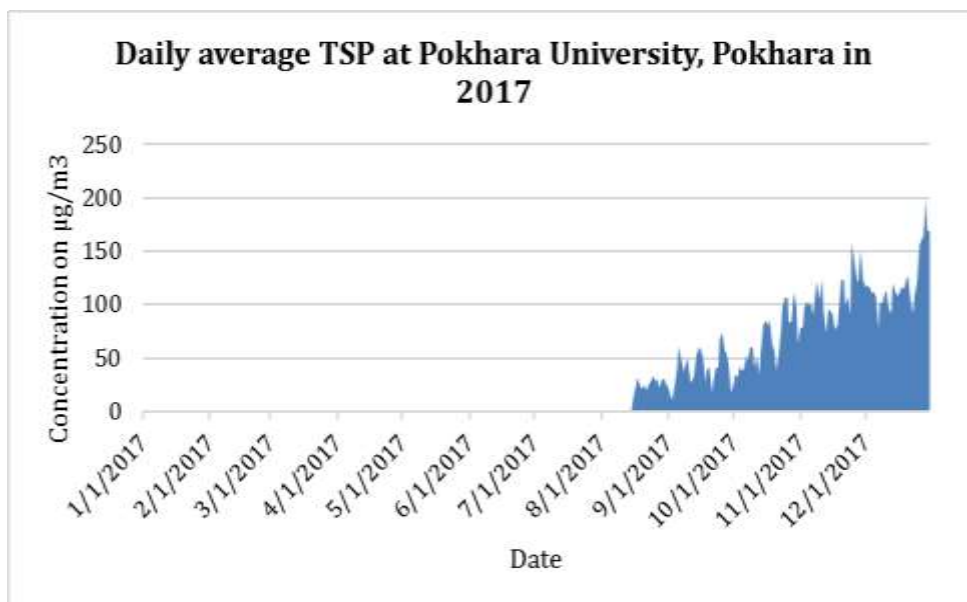


Figure 19: Daily average of TSP

Monthly average of TSP

The highest and the lowest concentration of TSP was found during December and August respectively. The mean value for those months were found to be 120.99 and 26.01 $\mu\text{g}/\text{m}^3$ respectively.

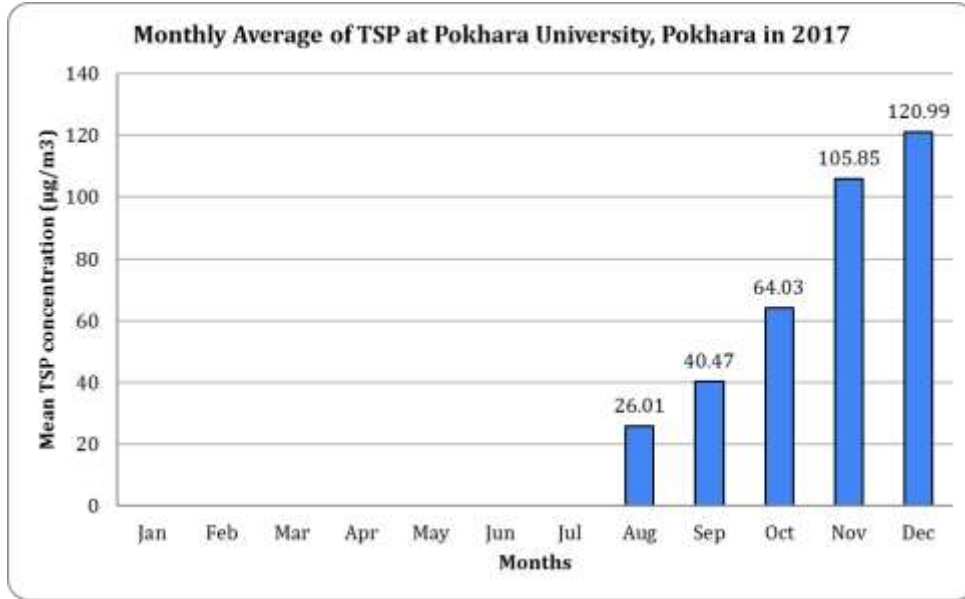


Figure 20: Monthly Average of TSP

Monthly Variation of TSP

Variation in concentration of TSP was found more during December and low during August.

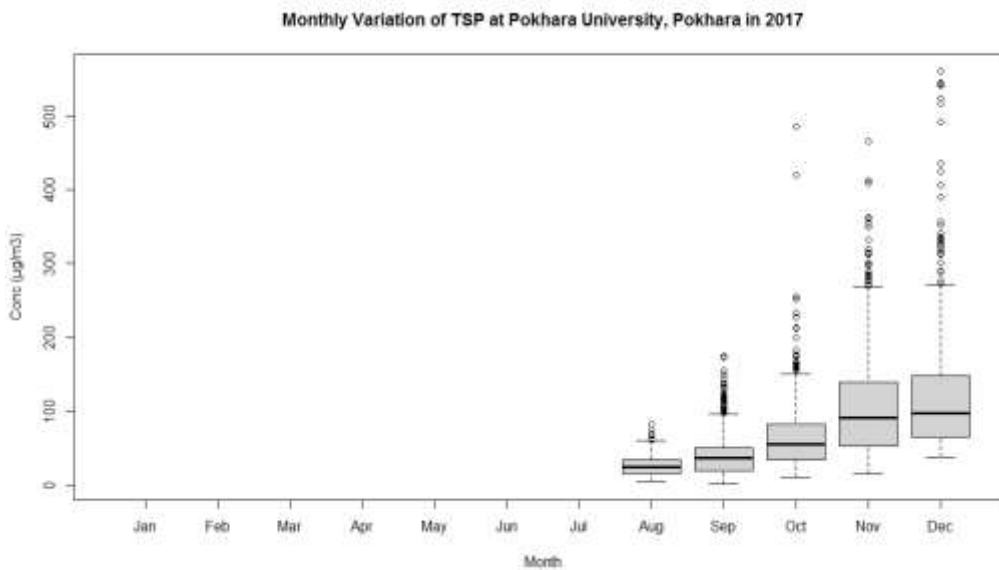


Figure 21: Monthly Variation of TSP.

Diurnal variation of average TSP

The diurnal variation of average TSP concentrations can be shown in the figure below. The variation in TSP concentration was high at around 4 pm and low at 2-3 am.

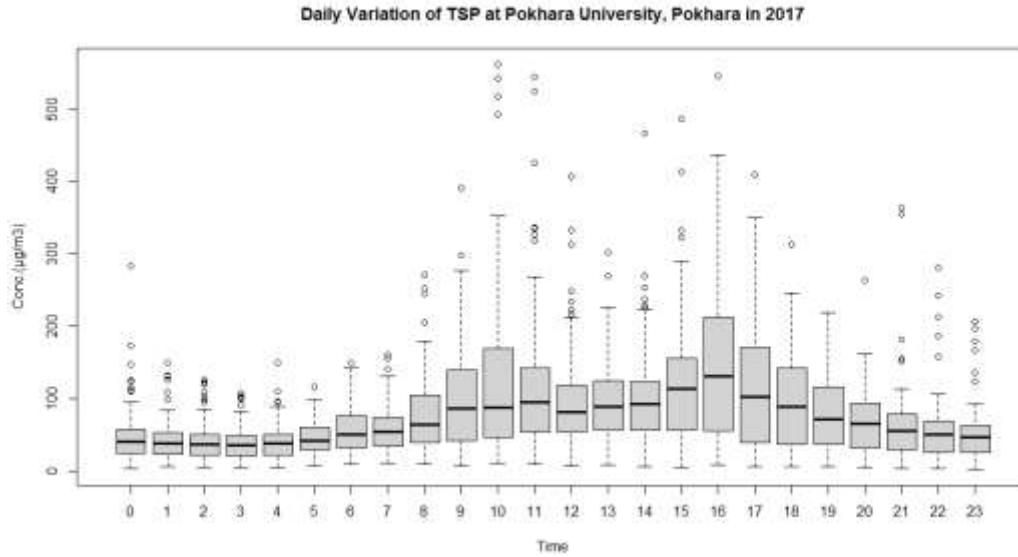


Figure 22: Diurnal Variation of TSP

Compliance status of TSP

The total days of TSP monitored in the year 2017 counts 138 of which none of the days exceed the NAAQS guideline.

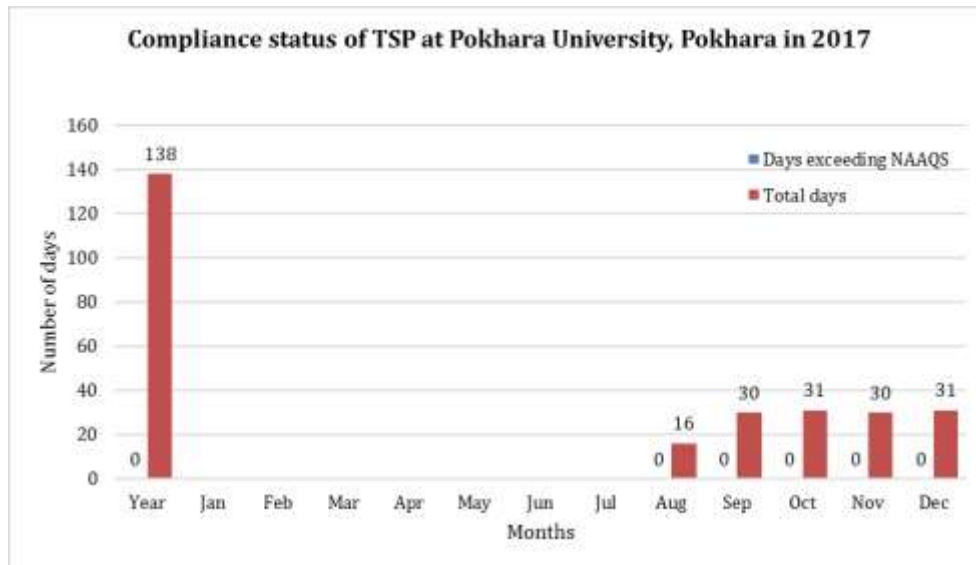


Figure 23: Compliance status of TSP

2.2. Air quality status of 2018

2.2.1. Annual average of PM₁, PM_{2.5}, PM₁₀ and TSP

The annual average of PM₁, PM_{2.5}, PM₁₀ and TSP of the PU Pokhara monitoring station was calculated as shown in figure below.

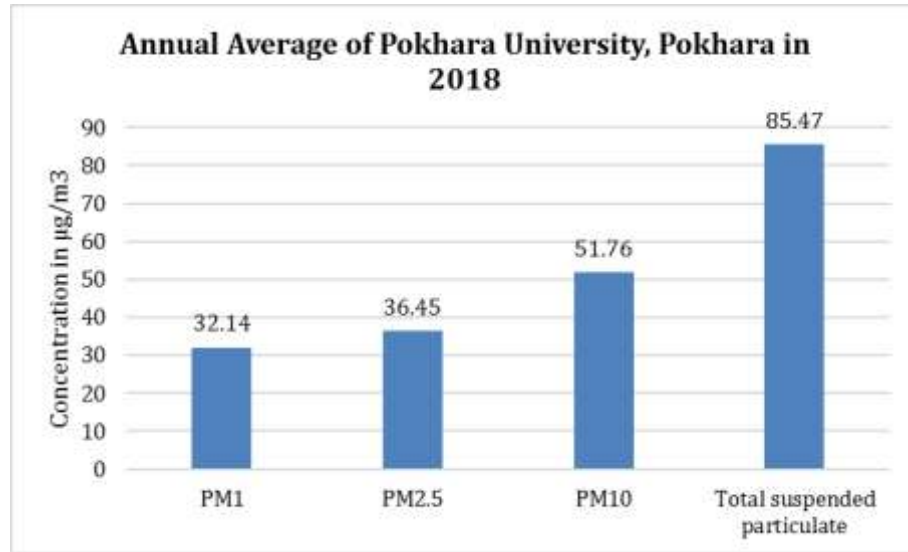


Figure 24: Annual average of PM₁, PM_{2.5}, PM₁₀ and TSP in 2018

2.2.2. Temporal variation of PM₁

Annual average of PM₁

The annual average of PM₁ at PU Pokhara station was found to be $57.97\mu\text{g}/\text{m}^3$. Histogram of hourly average PM₁ is shown in the figure below.

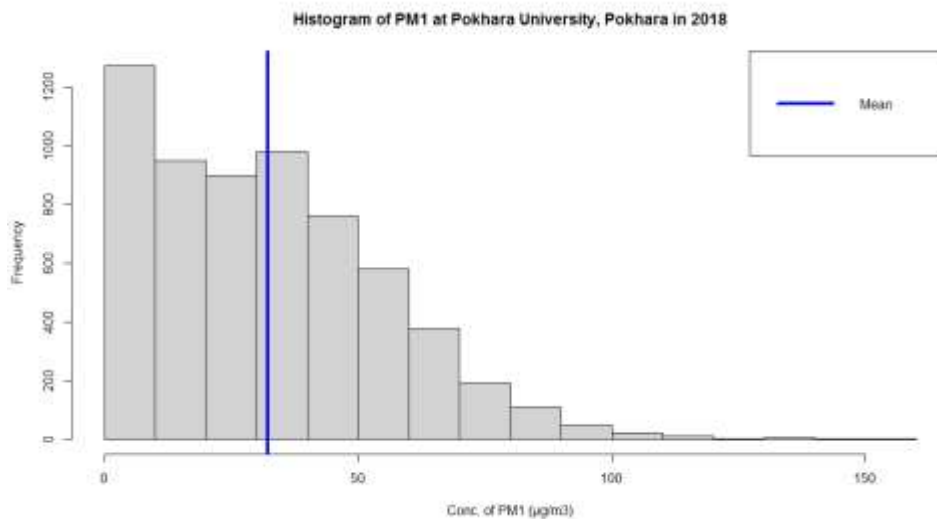


Figure 25 : Histogram of PM₁.

Daily average of PM₁

Daily average concentration of PM₁ was high during March and was found low August.

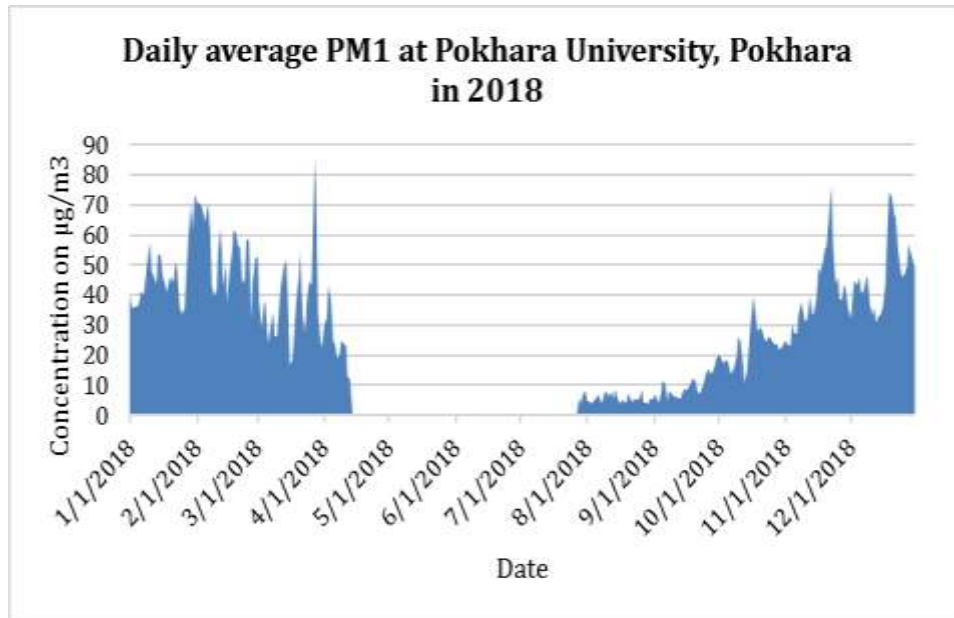


Figure 26: Daily average of PM₁

Monthly average of PM₁

The highest and the lowest concentration of PM₁ was found during February and August respectively. The mean value for those months were found to be 54.22 and 5.59 µg/m³ respectively.

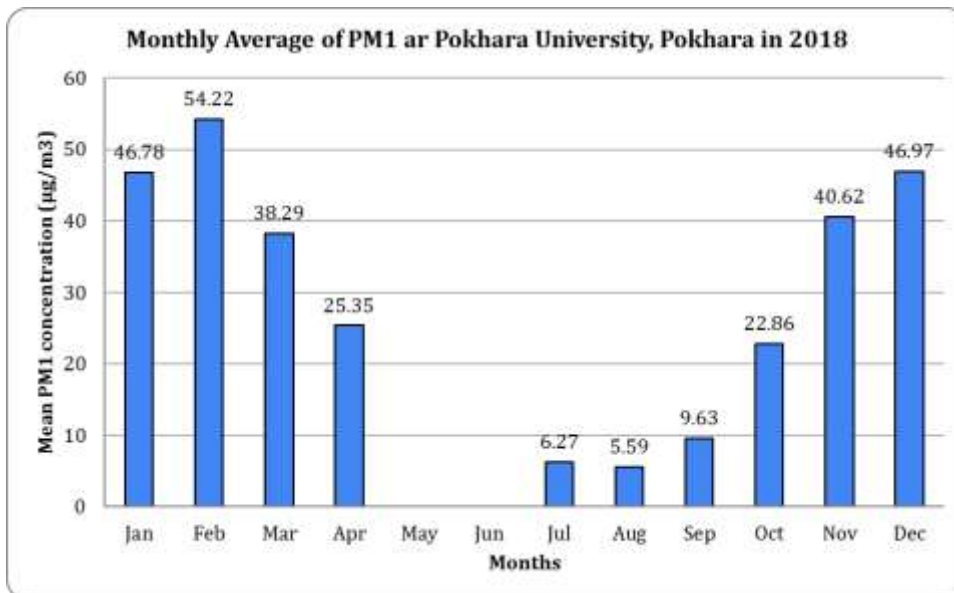


Figure 27: Monthly Average of PM₁

Monthly Variation of PM₁

Variation in concentration of PM₁ can be shown in figure below.

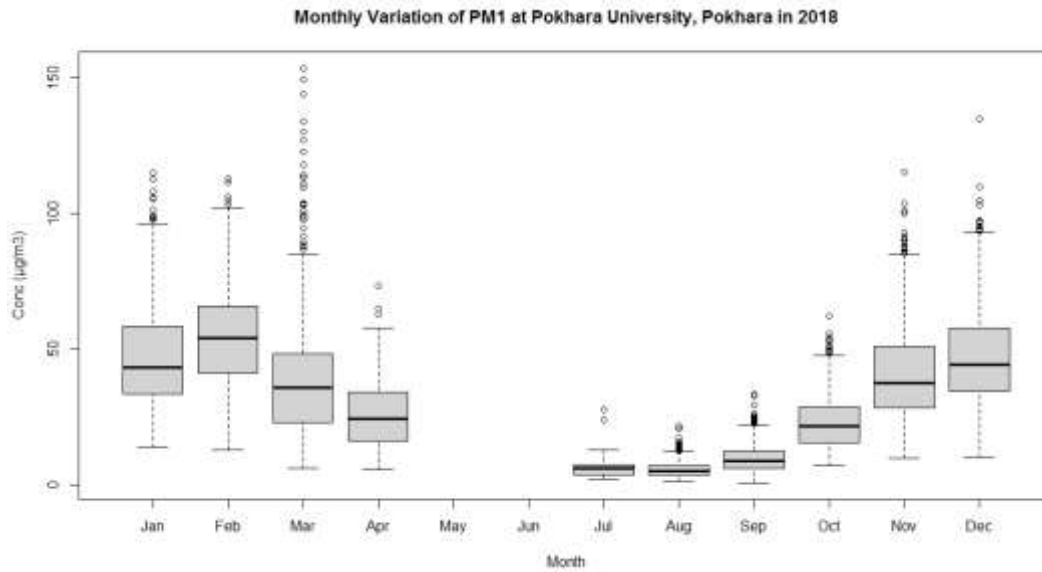


Figure 28: Monthly Variation of PM₁

Seasonal variation of average PM₁

Ambient concentration of average PM₁ during winter and post monsoon can be shown in the figure below. The concentration of PM₁ was found higher during winter (47.32 µg/m³) than winter season (24.37 µg/m³).

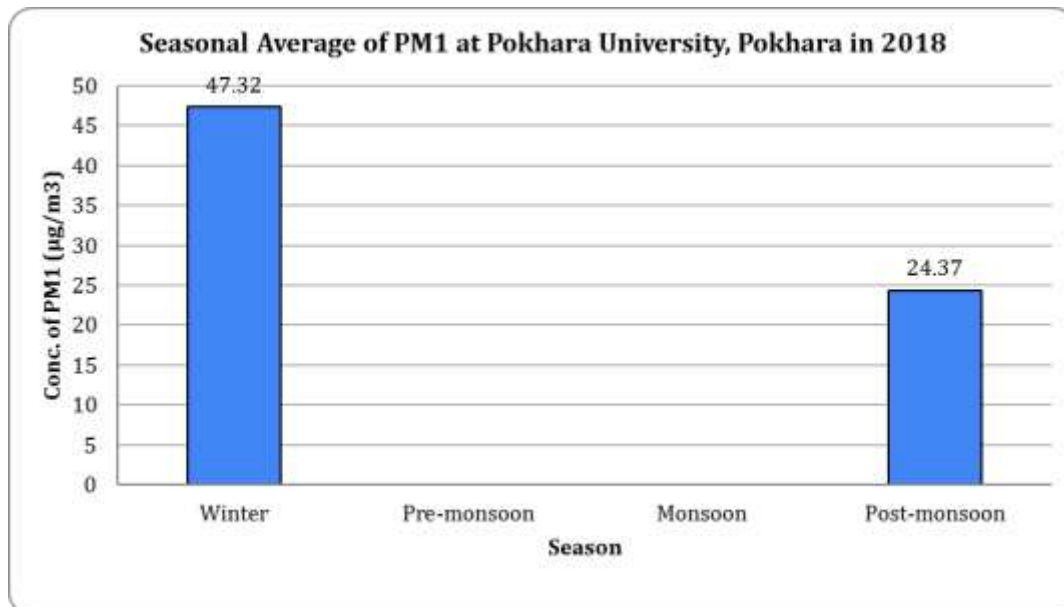


Figure 29: Seasonal variation of PM₁

Diurnal variation of average PM₁ concentration

The diurnal variation of average PM₁ concentrations can be shown in the figure below which was almost similar throughout the day.

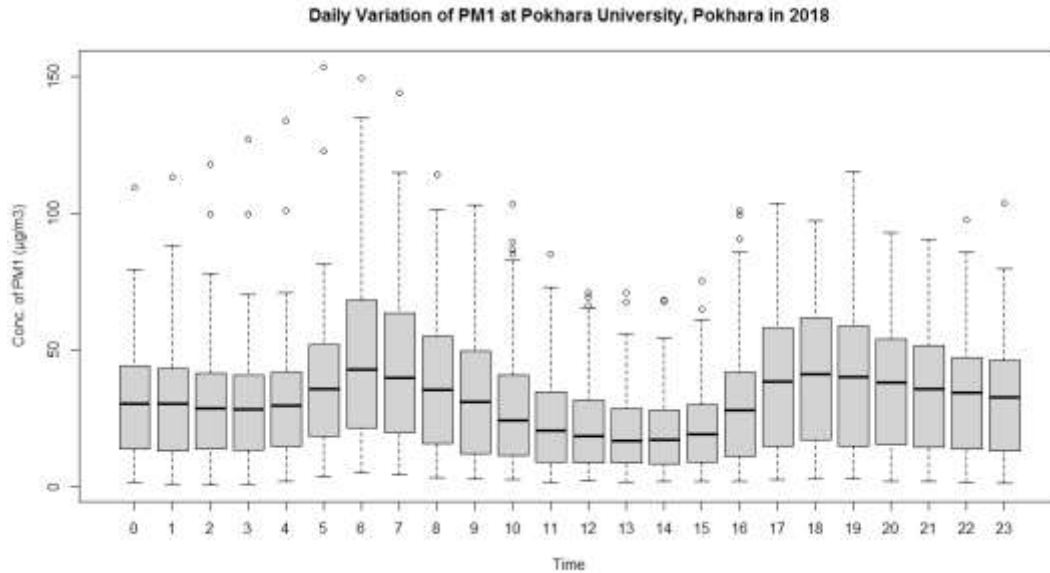


Figure 30: Diurnal variation of PM₁

2.2.3. Temporal variation of PM_{2.5}

Annual average of PM_{2.5}

The annual average of PM_{2.5} at PU Pokhara station was found to be 36.45 µg/m³. Histogram of hourly average PM_{2.5} is shown in the figure below.

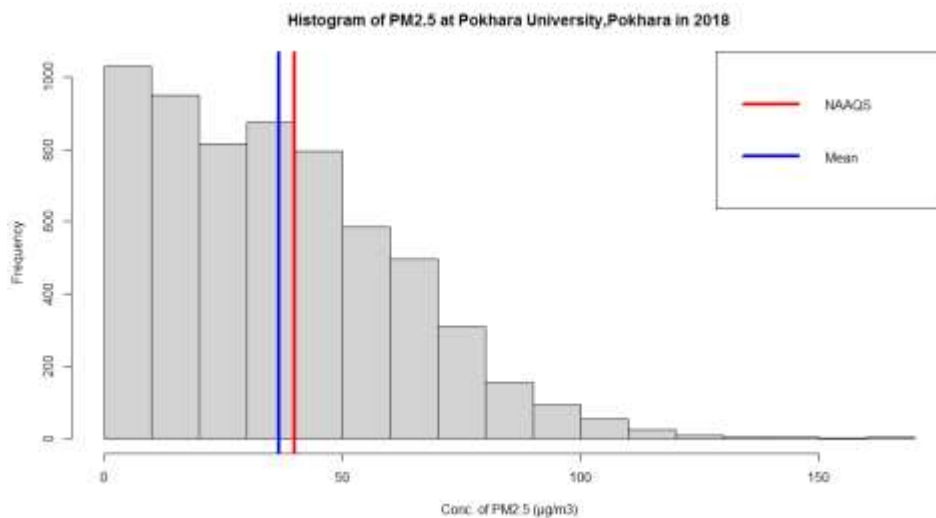


Figure 31 : Histogram of PM_{2.5}

Daily average of PM_{2.5}

Daily average concentration of PM_{2.5} was high during March and was found low August.

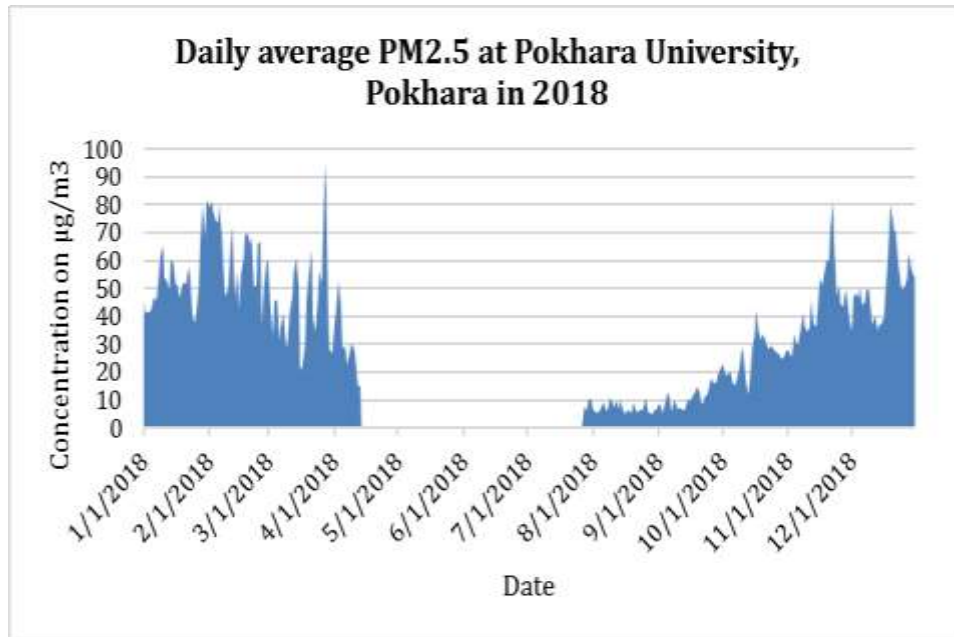


Figure 32: Daily average of PM_{2.5}

Monthly average of PM_{2.5}

The highest and the lowest concentration of PM_{2.5} was found during February and August respectively. The mean value for those months were found to be 62.25 and 7.01 µg/m³ respectively.

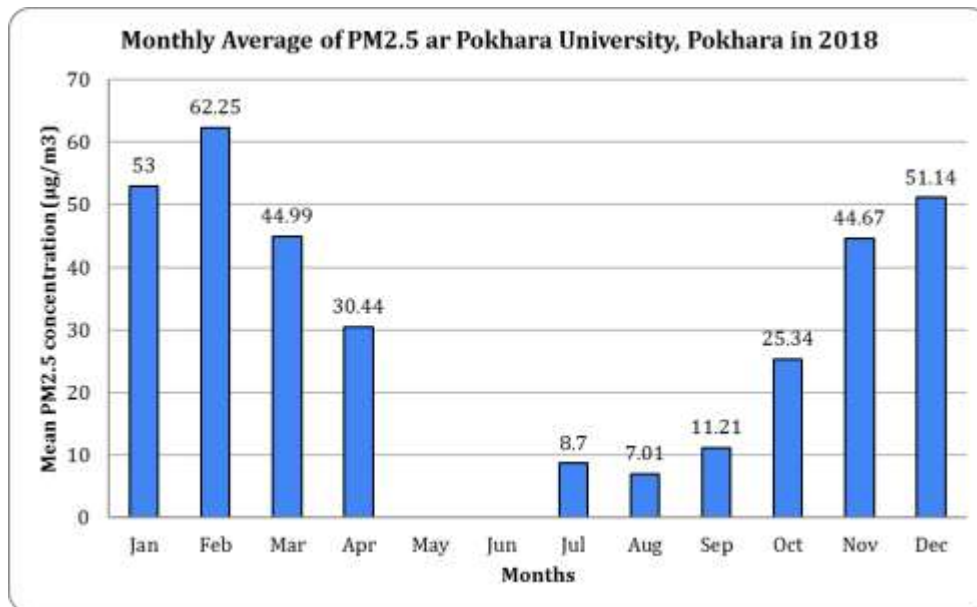


Figure 33: Monthly Average of PM_{2.5}

Monthly Variation of PM_{2.5}

Variation in concentration of PM_{2.5} was found more during March and April whereas low during August.

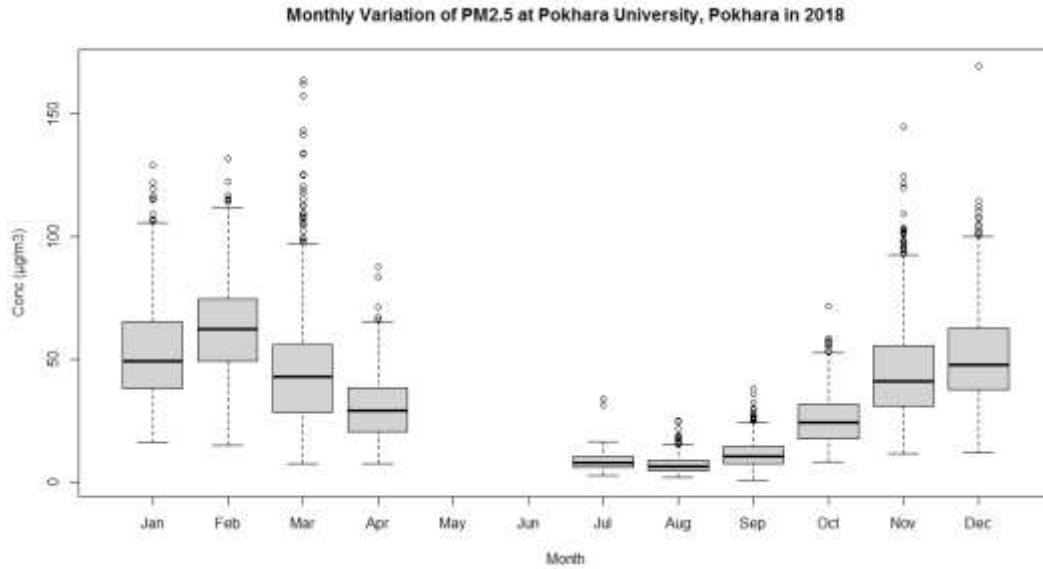


Figure 34: Monthly Variation of PM_{2.5}

Seasonal variation of average PM_{2.5} concentration

Ambient concentration of average PM_{2.5} during winter and post monsoon can be shown in the figure below. The concentration of PM₁ was found higher during winter (54.07 µg/m³) than post-monsoon season (27.08 µg/m³).

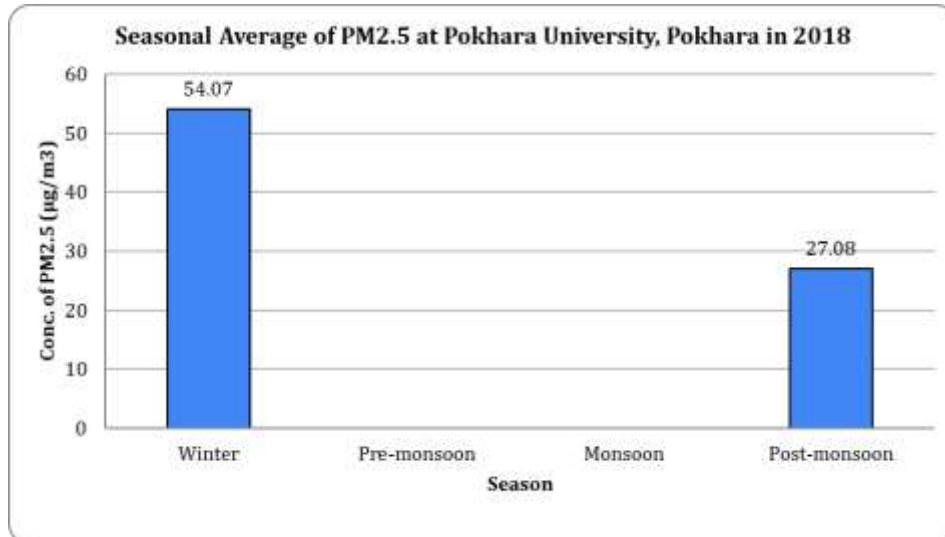


Figure 35: Seasonal variation of PM_{2.5}

Diurnal variation of average PM_{2.5} concentration

The diurnal variation of average PM_{2.5} concentrations was high at 7pm and low at 2 pm.

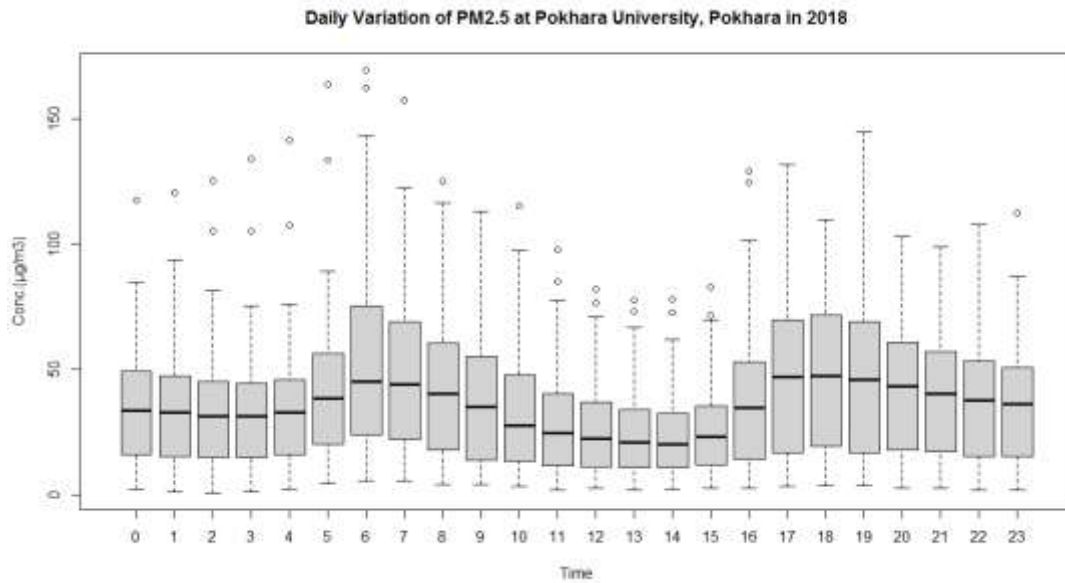


Figure 36: Diurnal variation of PM_{2.5}

Compliance status of PM_{2.5}

The total days of PM_{2.5} monitored in the year 2018 counts 260, of which 121 days exceed the NAAQS guideline.

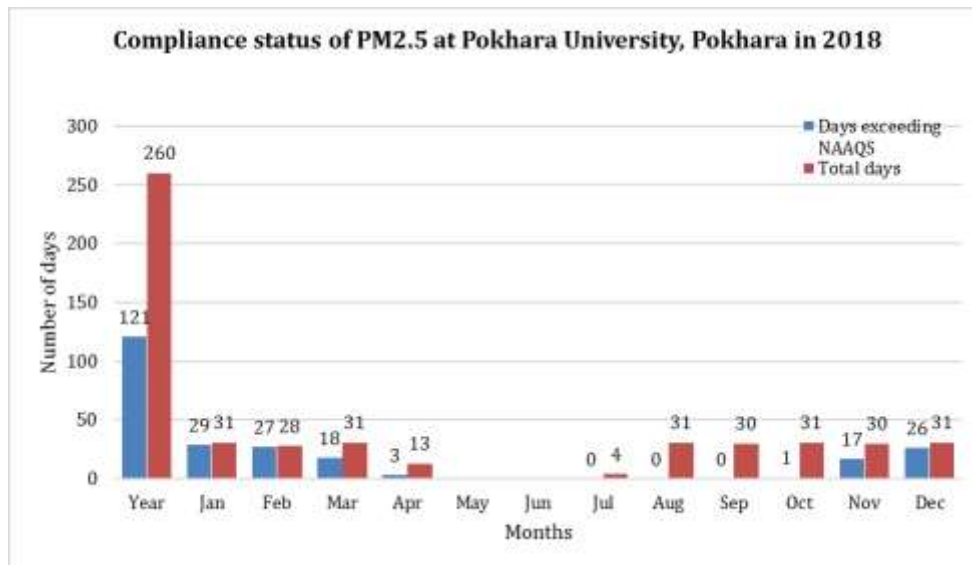


Figure 37: Compliance status of PM_{2.5}

2.2.4. Temporal variation of PM₁₀

Annual average of PM₁₀

The annual average of PM₁₀ at PU Pokhara station was found to be 51.76 µg/m³. Histogram of hourly average PM₁₀ is shown in the figure below.

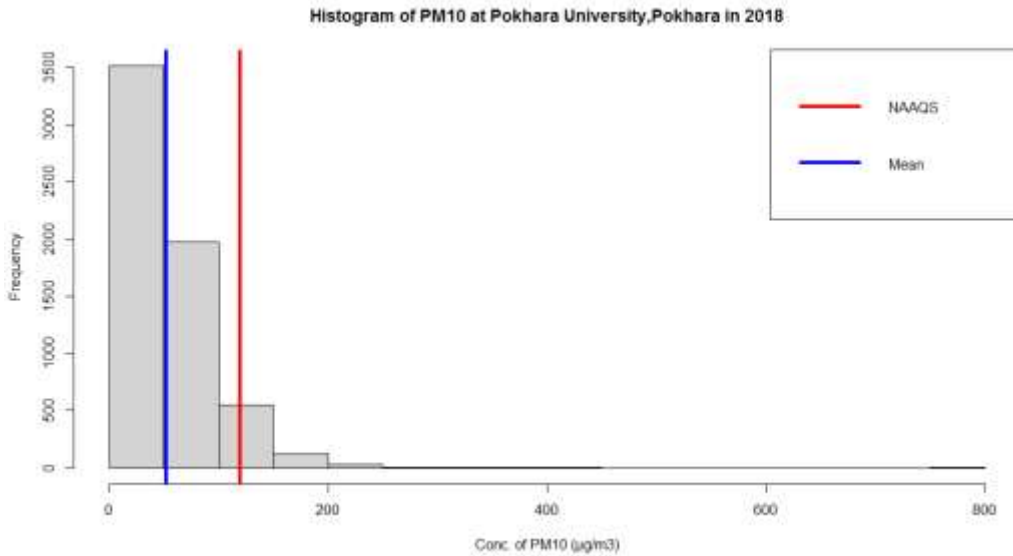


Figure 38 : Histogram of PM₁₀.

Daily average of PM₁₀:

Daily average concentration of PM₁₀ was high during March and was found low August.

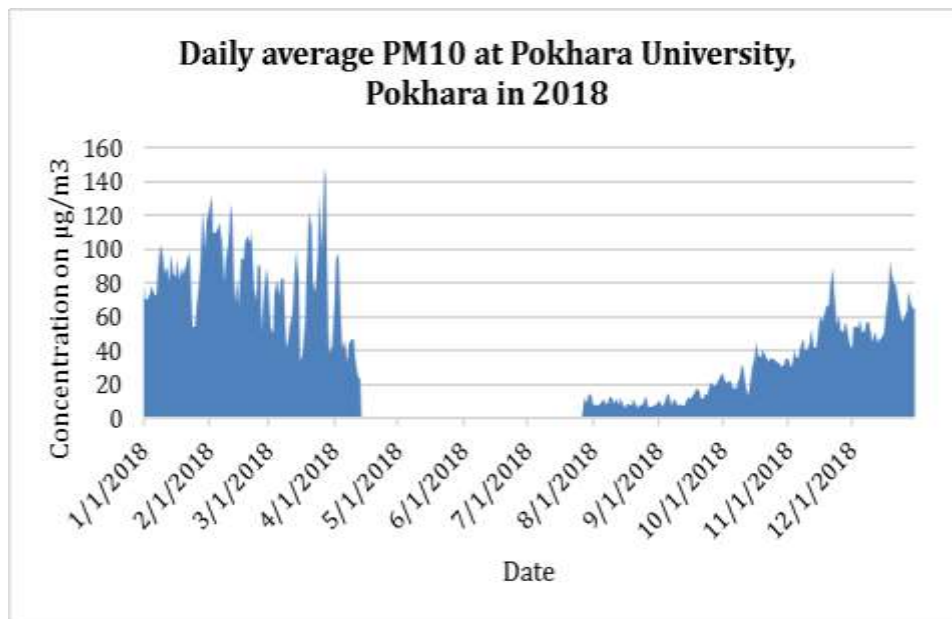


Figure 39: Daily average of PM₁₀

Monthly average of PM₁₀

The highest and the lowest concentration of PM₁₀ was found during February and August respectively. The mean value for those months were found to be 96.9 and 8.87 $\mu\text{g}/\text{m}^3$ respectively.

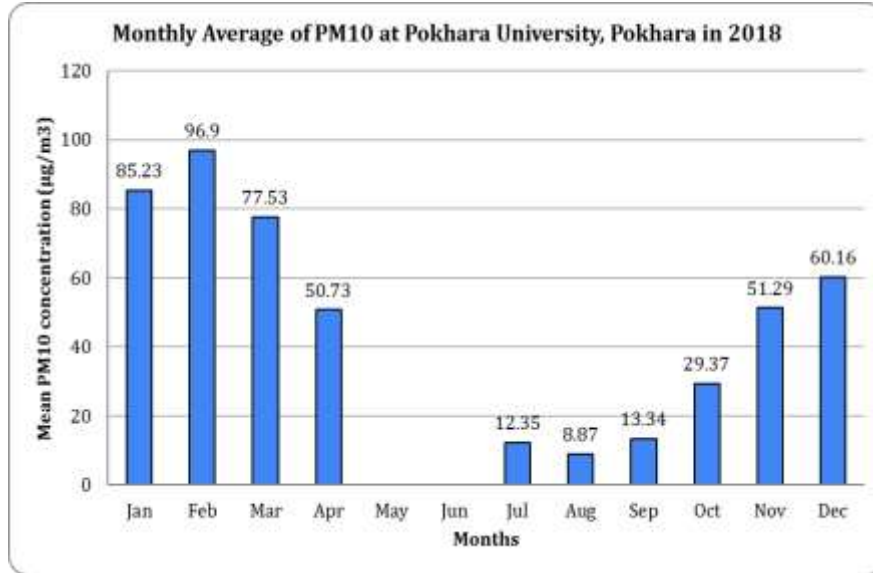


Figure 40: Monthly average of PM₁₀

Monthly Variation of PM₁₀

Variation in concentration of PM₁₀ was found almost similar throughout the year.

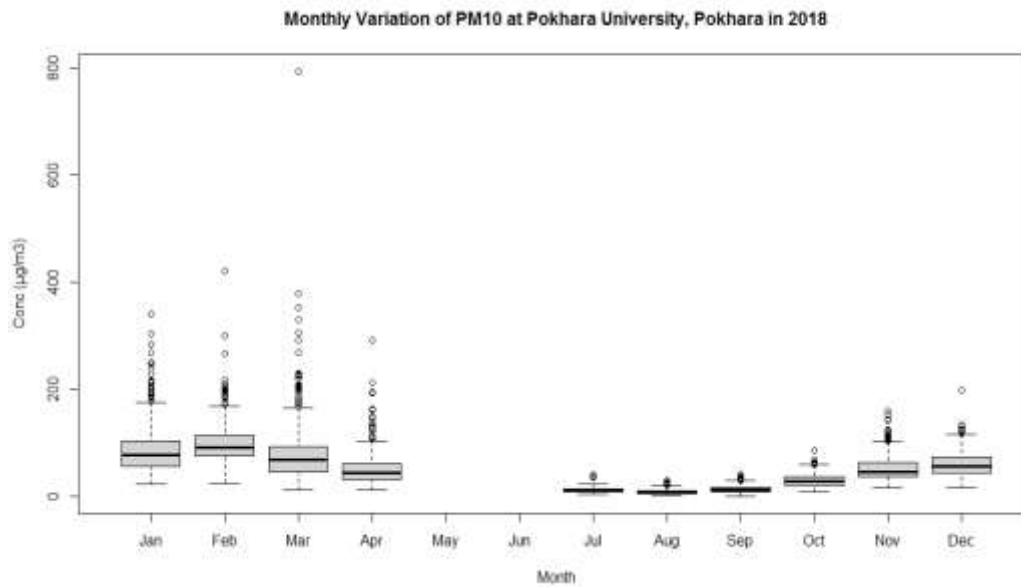


Figure 41: Monthly Variation of PM₁₀

Seasonal variation of average PM₁₀ concentration:

Ambient concentration of average PM₁₀ during winter and post monsoon can be shown in the figure below. The concentration of PM₁₀ was found higher during winter (85.08 µg/m³) than monsoon season (31.33 µg/m³).

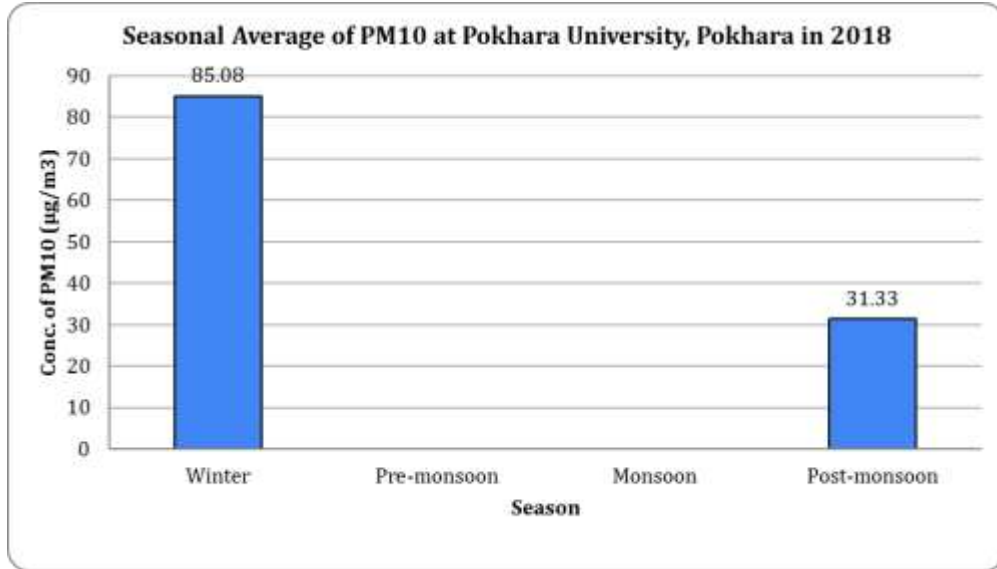


Figure 42: Seasonal variation of PM₁₀.

Diurnal variation of average PM₁₀ concentration

The diurnal variation of average PM₁₀ concentrations can be shown in the figure below which was almost similar throughout the day.

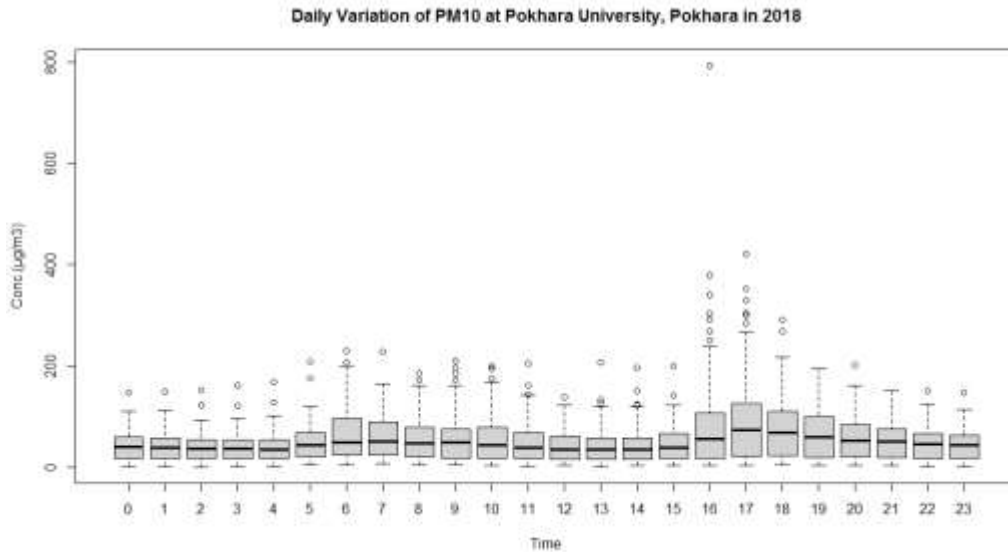


Figure 43: Diurnal variation of PM₁₀ concentration

Compliance status of PM₁₀

The total days of PM₁₀ monitored in the year 2018 counts 260, of which 9 days exceed the NAAQS guideline.

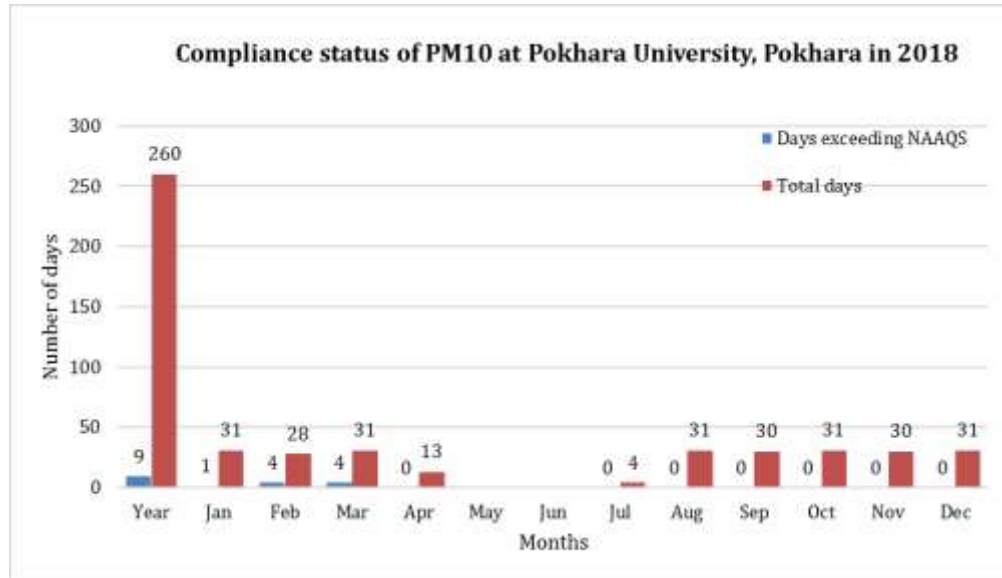


Figure 44: Compliance status of PM₁₀

2.2.5. Temporal variation of TSP

Annual average of TSP

The annual average of TSP at PU Pokhara station was found to be 85.47 $\mu\text{g}/\text{m}^3$. Histogram of hourly average TSP is shown in the figure below.

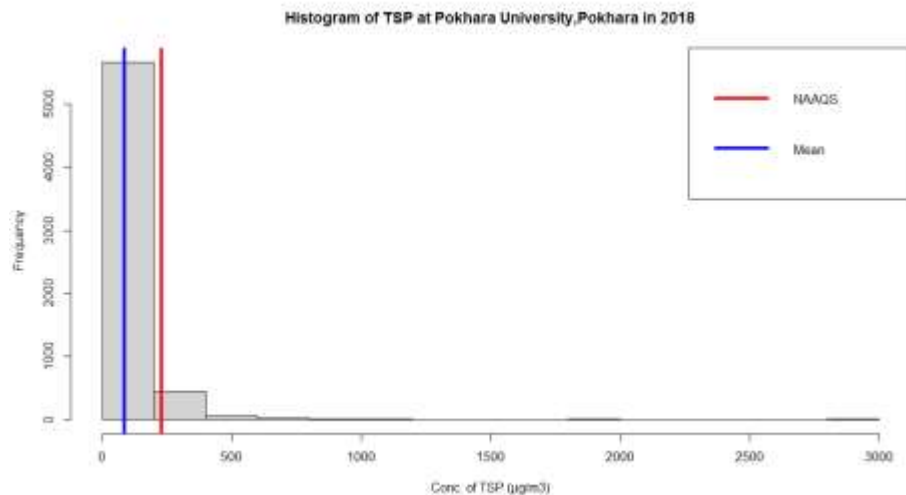


Figure 45 : Histogram of TSP

Daily average of TSP:

Daily average concentration of TSP was high during March and was found low August.

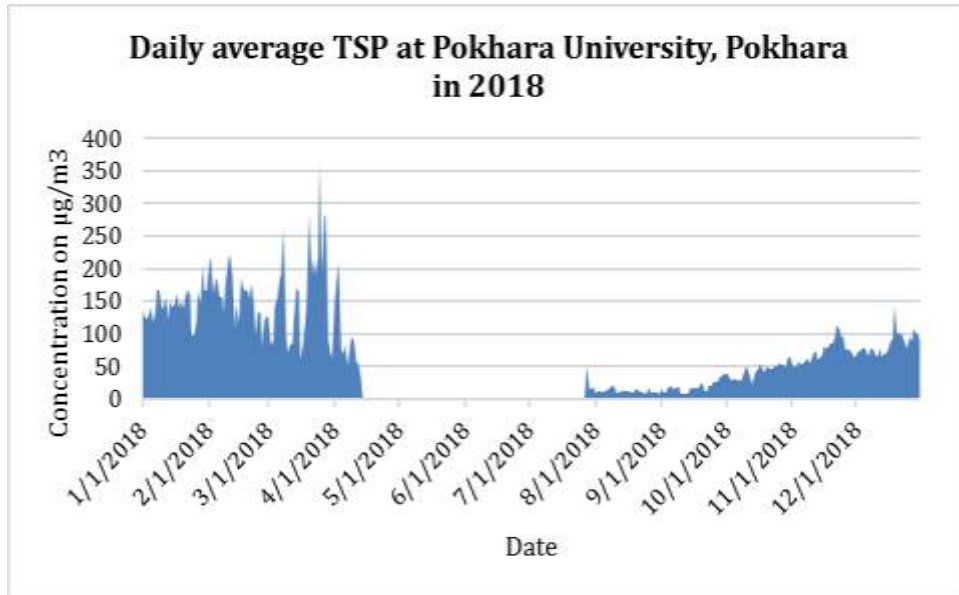


Figure 46: Daily average of TSP

Monthly average of TSP

The highest and the lowest concentration of TSP was found during February and August respectively. The mean value for those months were found to be 158.46 and 12.24 $\mu\text{g}/\text{m}^3$ respectively.

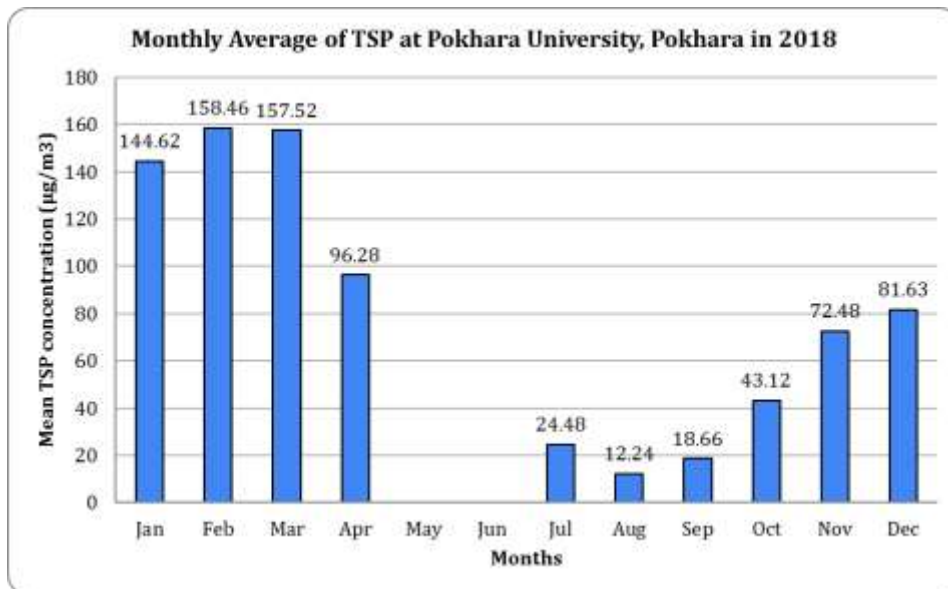


Figure 47: Monthly Average of TSP

Monthly Variation of TSP

Variation in concentration of TSP was found similar throughout the year.

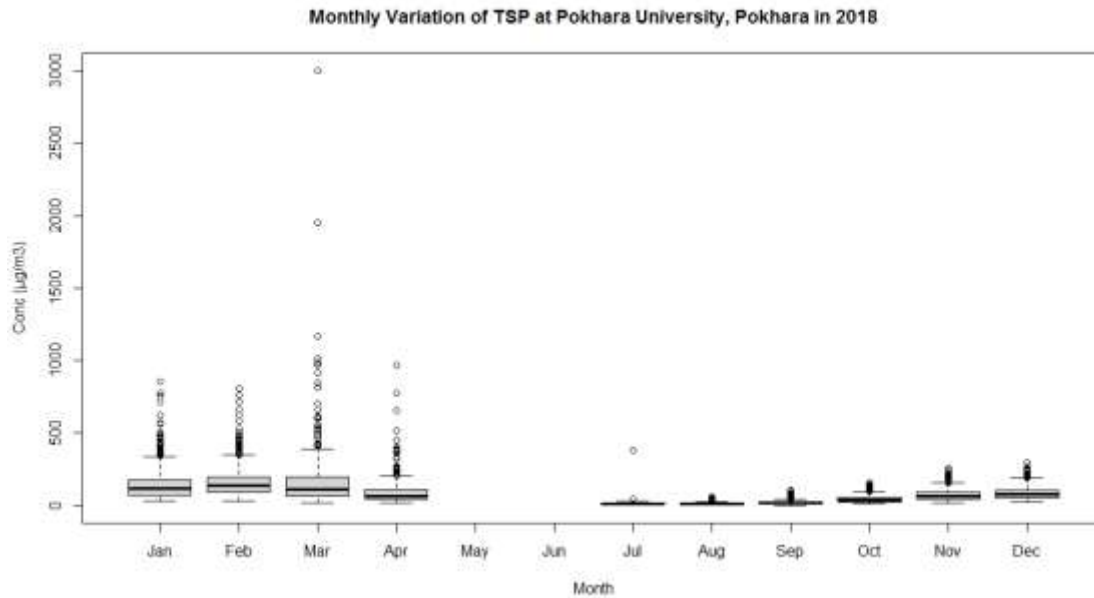


Figure 48: Monthly Variation of TSP.

Seasonal variation of average TSP concentration

Ambient concentration of average TSP during winter and post monsoon can be shown in the figure below. The concentration of TSP was found higher during winter ($141.36 \mu\text{g}/\text{m}^3$) than monsoon season ($44.76 \mu\text{g}/\text{m}^3$).

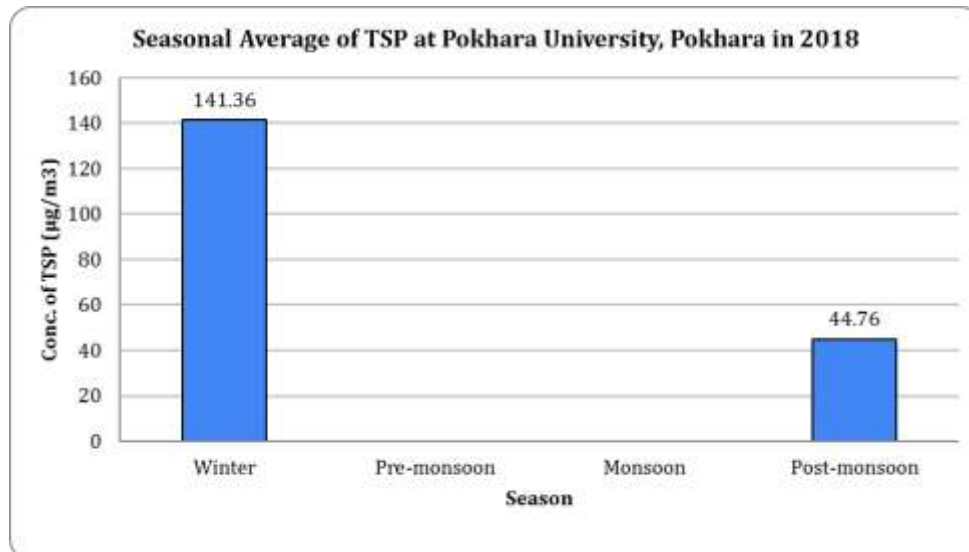


Figure 49: Seasonal variation of TSP

Diurnal variation of average TSP concentration

The diurnal variation of average TSP concentrations can be shown in the figure below which was almost similar throughout the day.

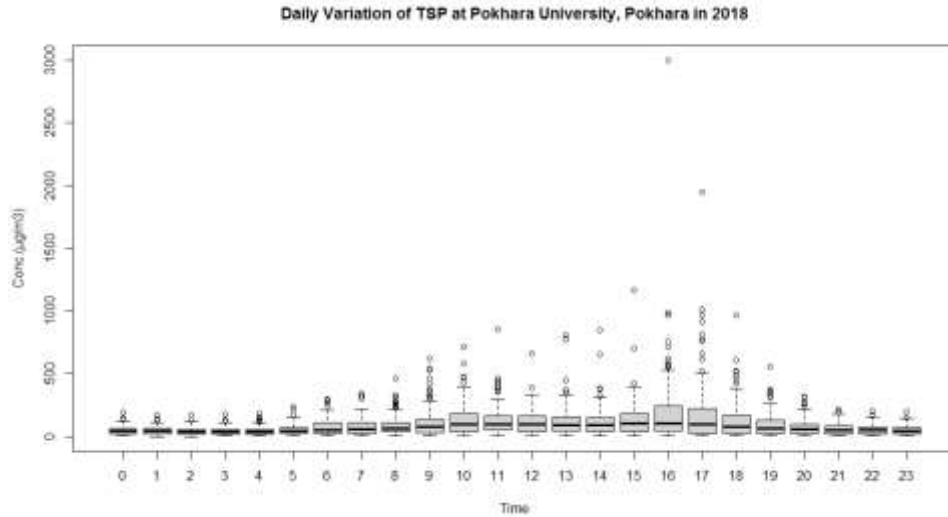


Figure 50: Diurnal Variation of TSP

Compliance status of TSP

The total days of TSP monitored in the year 2018 counts 260, of which 5 days exceed the NAAQS guideline as shown in in figure below.

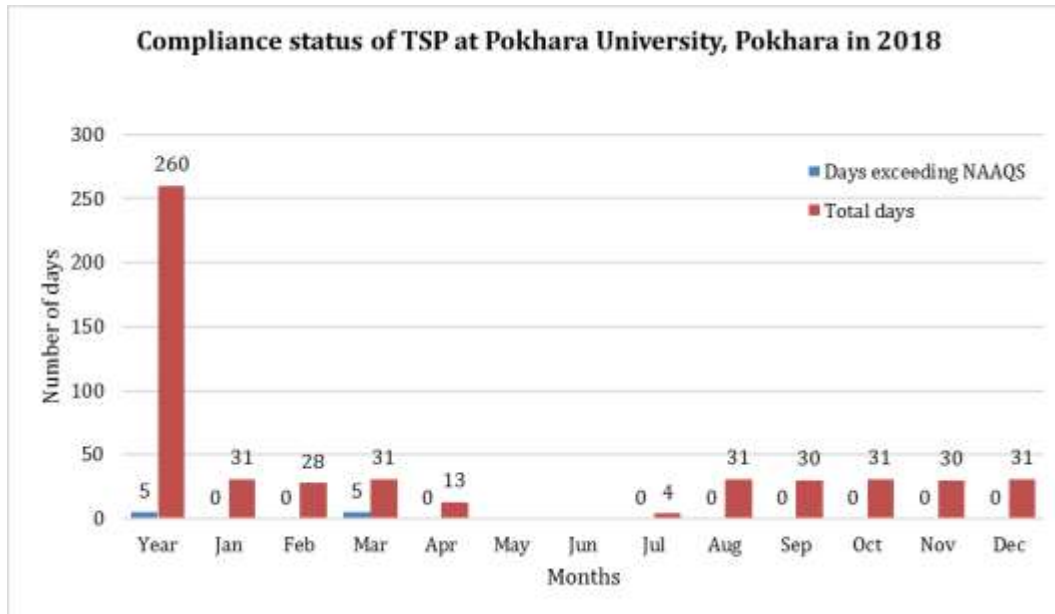


Figure 51: Compliance status of TSP

2.3. Air quality status, 2019

2.3.1. Annual average of PM₁, PM_{2.5}, PM₁₀ and TSP

The annual average of PM₁, PM_{2.5}, PM₁₀ and TSP of the PU Pokhara monitoring station was calculated as shown in figure below.

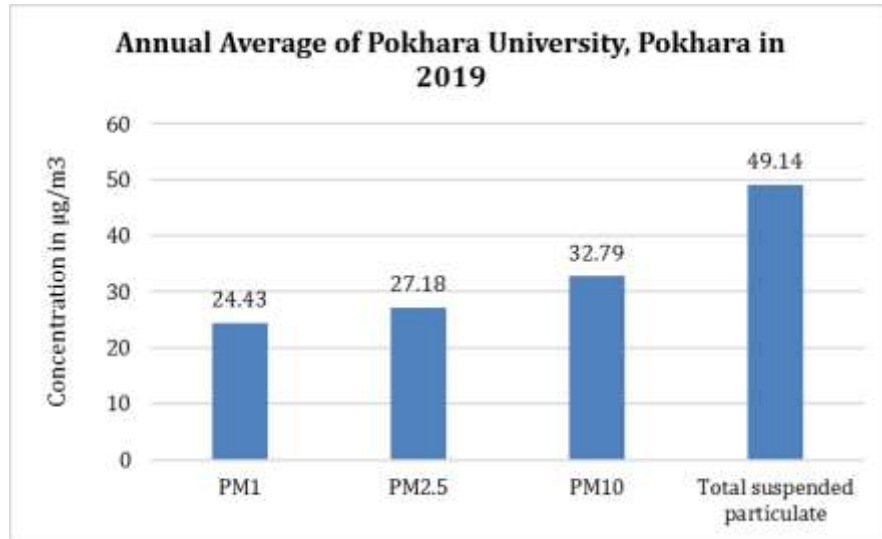


Figure 52: Annual average of PM₁, PM_{2.5}, PM₁₀ and TSP in 2019

2.3.2. Temporal variation of PM₁

Annual average of PM₁

The annual average of PM₁ at PU Pokhara station was found to be 24.43 $\mu\text{g}/\text{m}^3$. Histogram of hourly average PM₁ is shown in the figure below.

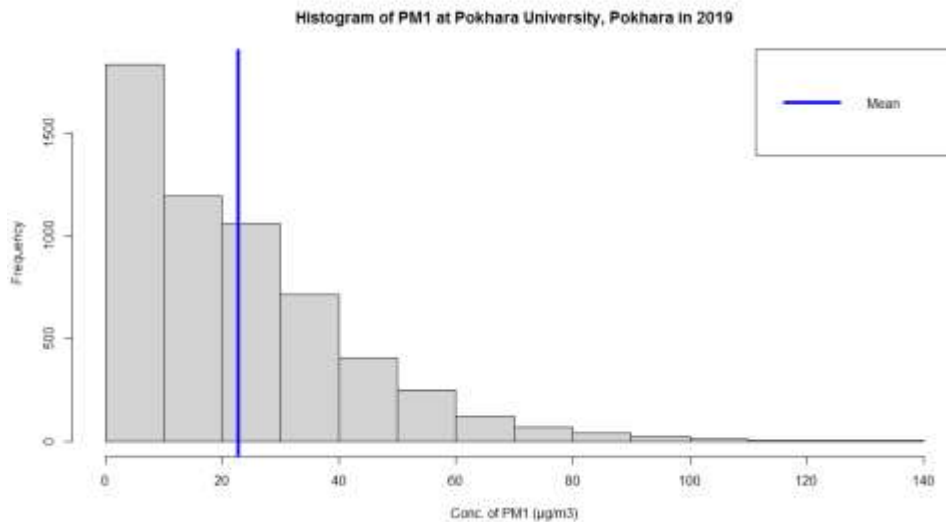


Figure 53 : Histogram of PM₁.

Daily average of PM₁:

Daily average concentration of PM₁ was high during January and was found low during July.

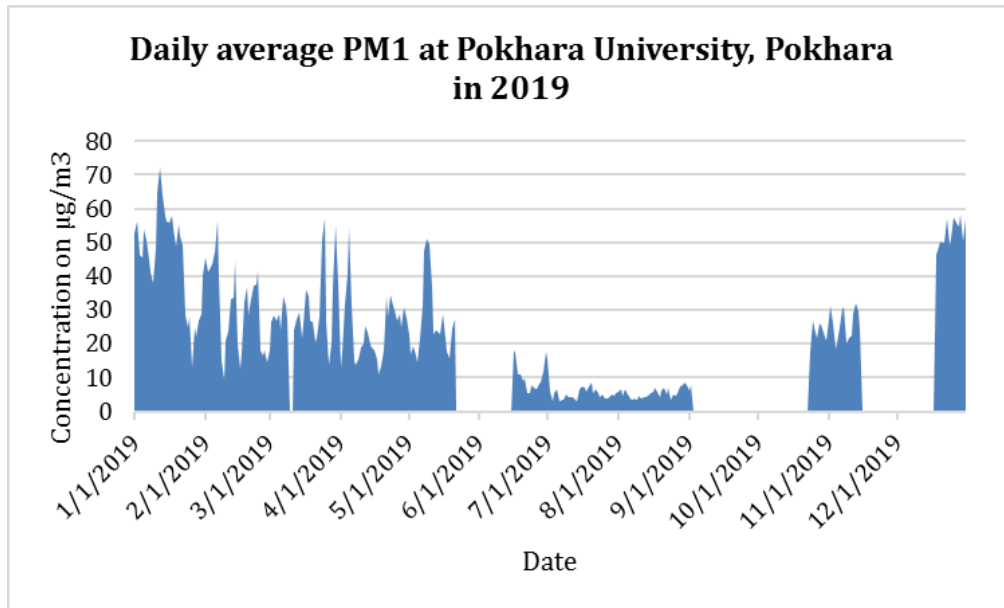


Figure 54: Daily average of PM₁

Monthly average of PM₁

The highest and the lowest concentration of PM₁ was found during December and July respectively. The mean value for those months were found to be 52.47 and 5.37 µg/m³ respectively.

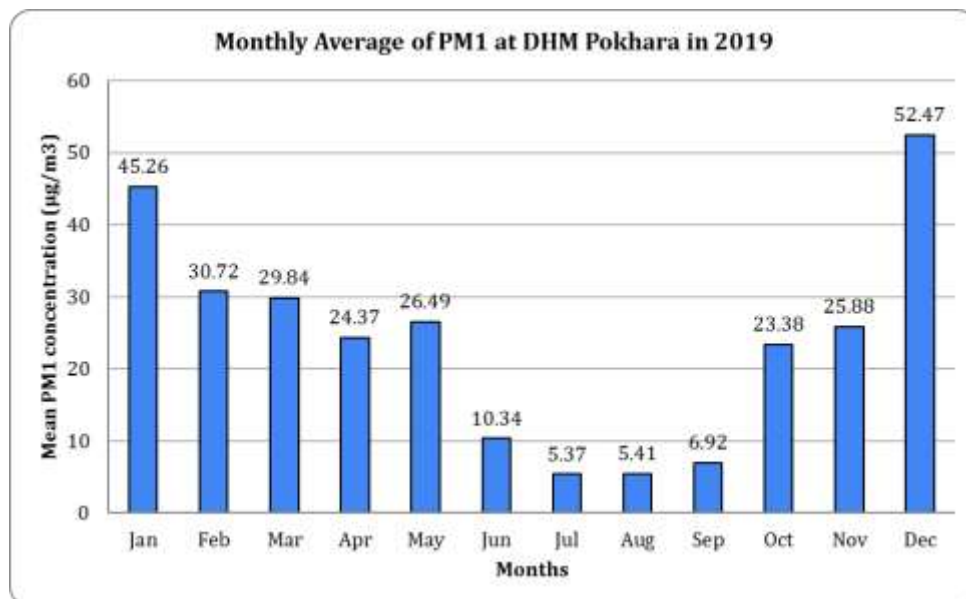


Figure 55: Monthly Average of PM₁

Monthly Variation of PM₁

Variation in concentration of PM₁ was found more during January whereas low during July.

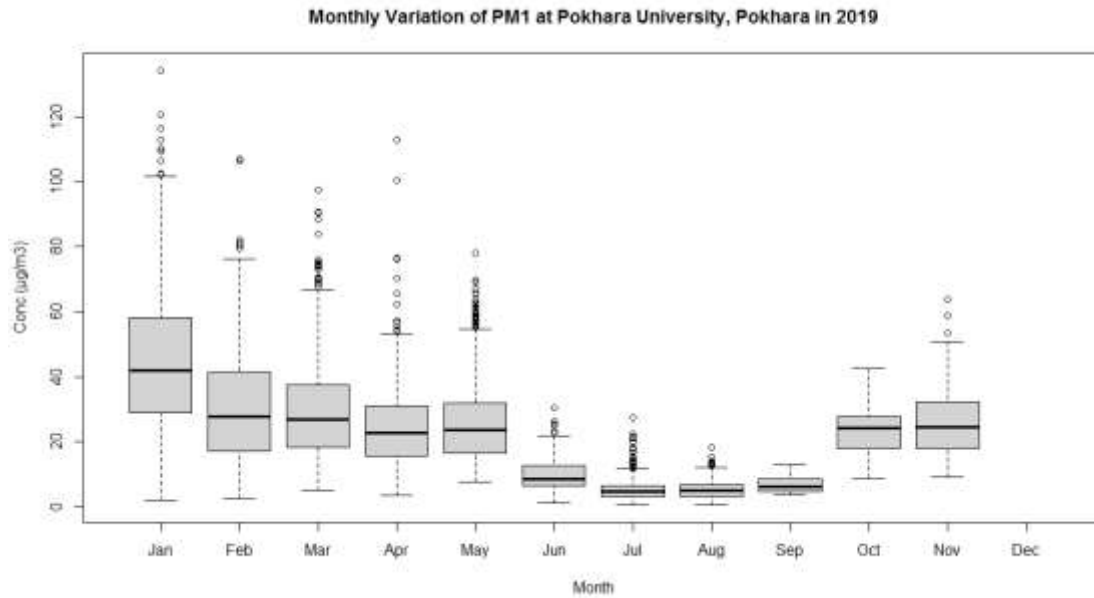


Figure 56: Monthly Variation of PM₁

Seasonal variation of average PM₁

Ambient concentration of average PM₁ during winter, pre- monsoon, monsoon and post monsoon can be shown in the figure below. The concentration of PM₁ was found the highest during winter (40.98 µg/m³) and lowest during monsoon season (7.04 µg/m³). Error! Reference source not found.

Figure 57: Seasonal variation of PM₁

Diurnal variation of average PM₁ concentration

The diurnal variation of average PM₁ concentrations can be shown in the figure below. The variation in PM₁ concentration was high at around 6 am and low at 12 to 2 pm.

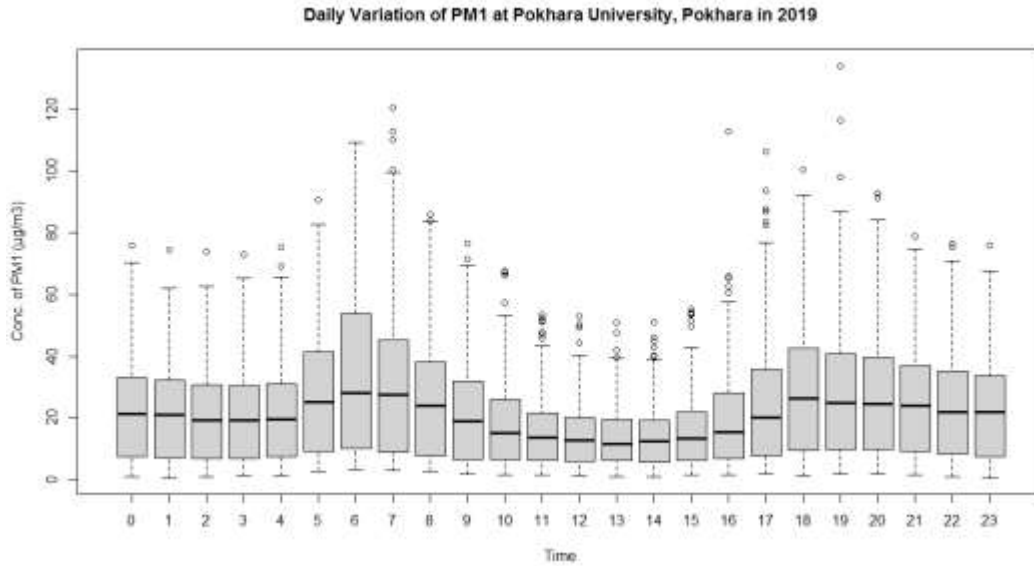


Figure 58: Diurnal variation of PM₁

2.3.3. Temporal variation of PM_{2.5}

Annual average of PM_{2.5}

The annual average of PM_{2.5} at PU Pokhara station was found to be 27.18 µg/m³. Histogram of hourly average PM_{2.5} is shown in the figure below.

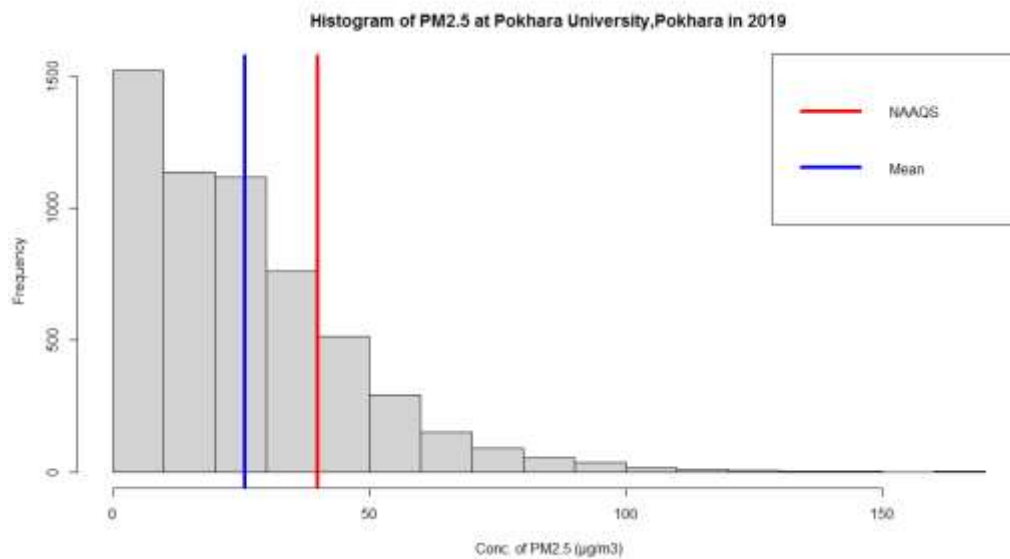


Figure 59 : Histogram of PM_{2.5}

Daily average of PM_{2.5}

Daily average concentration of PM_{2.5} was high during January and was found low during July.

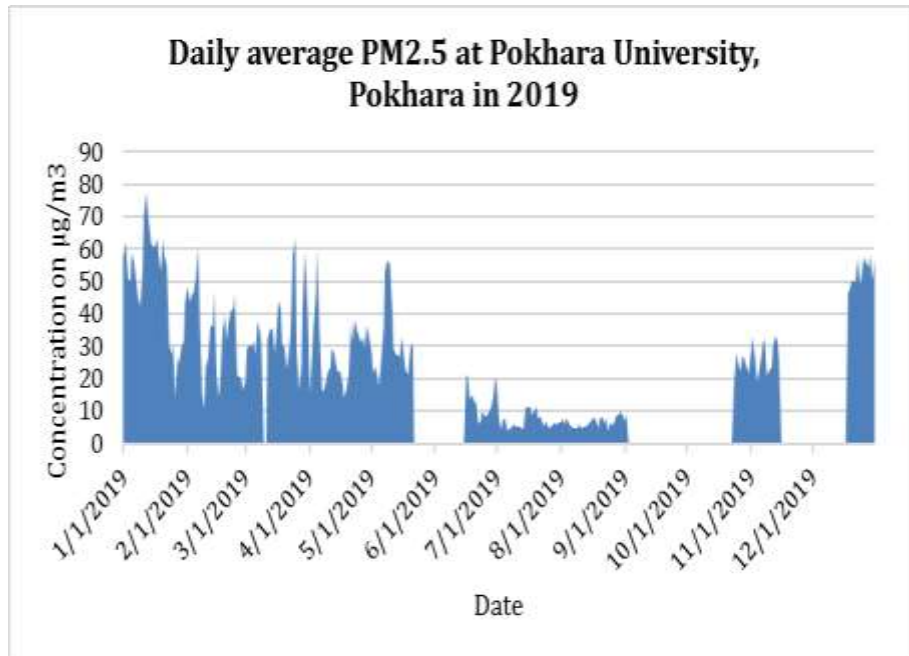


Figure 60: Daily average of PM_{2.5}

Monthly average of PM_{2.5}

The highest and the lowest concentration of PM_{2.5} was found during December and August respectively. The mean value for those months were found to be 52.47 and 6.58 µg/m³ respectively.

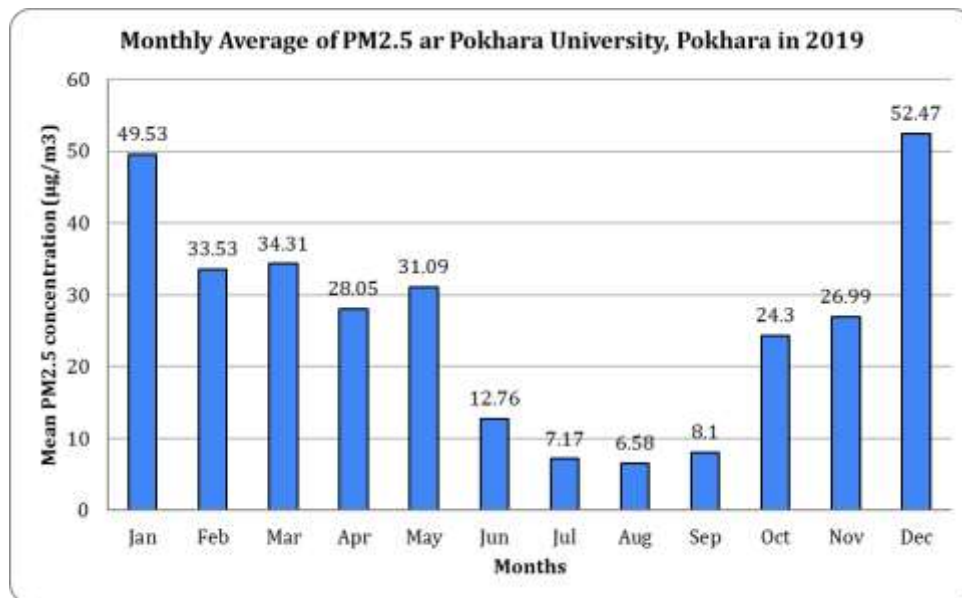


Figure 61: Monthly Average of PM_{2.5}

Monthly Variation of PM_{2.5}

Variation in concentration of PM_{2.5} was found more during January whereas low during July to August.

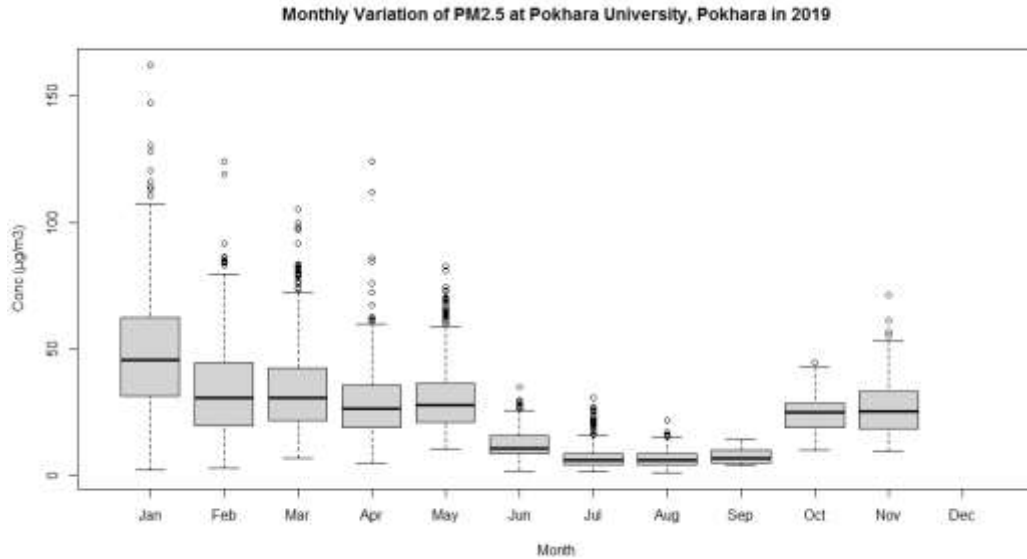


Figure 62: Monthly Variation of PM_{2.5}

Seasonal variation of average PM_{2.5}

Ambient concentration of average PM_{2.5} during winter, pre- monsoon, monsoon and post monsoon can be shown below. The concentration of PM_{2.5} was found the highest during winter (44.73 µg/m³) and lowest during monsoon season (8.84 µg/m³).

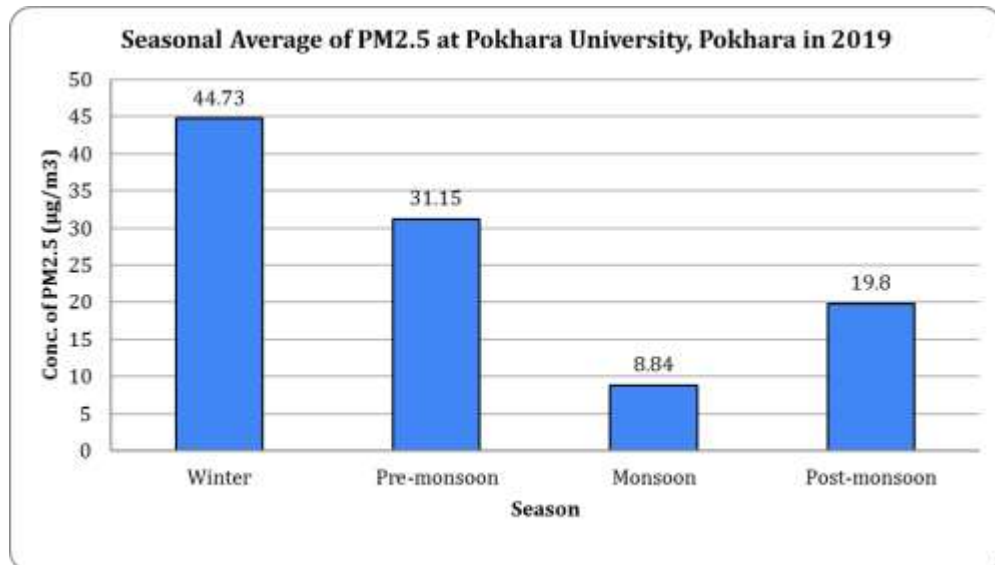


Figure 63: Seasonal variation of PM_{2.5}

Diurnal variation of average PM_{2.5} concentration

The diurnal variation of average PM_{2.5} concentrations can be shown in the figure below. The variation in PM_{2.5} concentration was high at around 6 am and low at 1 to 2 pm.

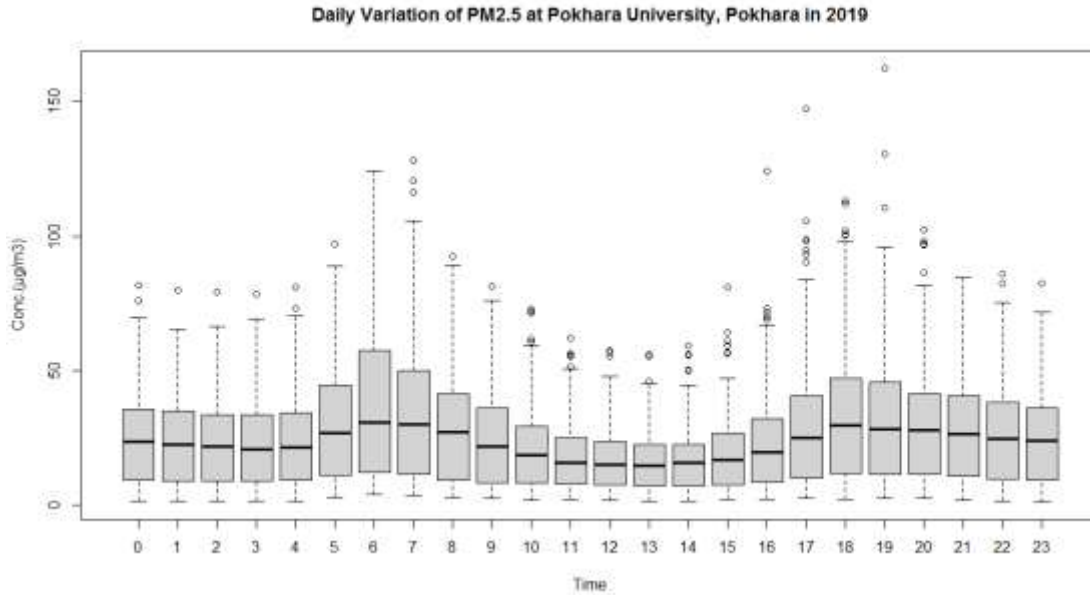


Figure 64: Diurnal variation of PM_{2.5}

Compliance status of PM_{2.5}

The total days of PM_{2.5} monitored in the year 2019 counts 255 of which 61 days exceed the NAAQS guideline.

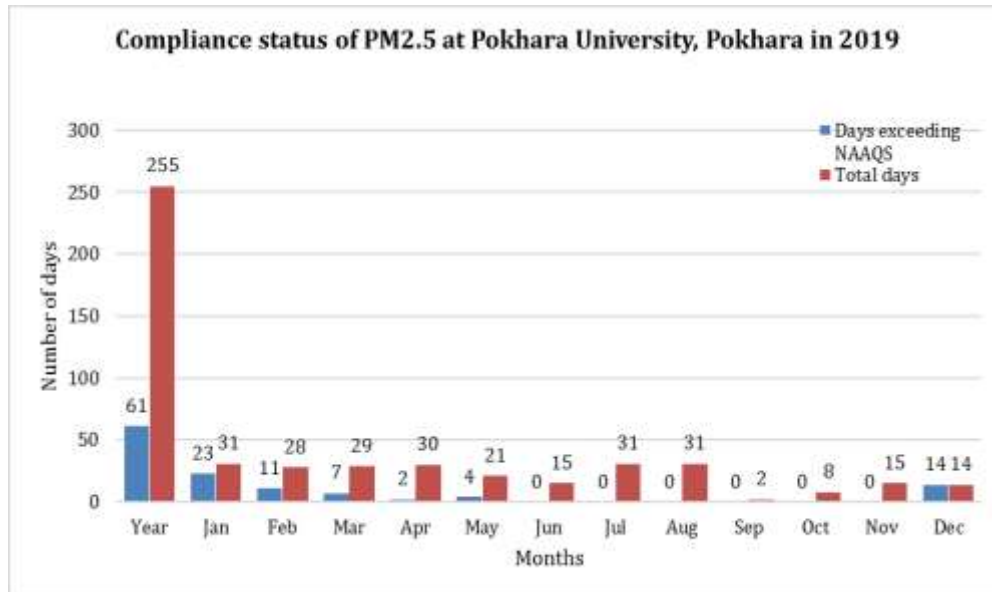


Figure 65: Compliance status of PM_{2.5}

2.3.4. Temporal variation of PM₁₀

Annual average of PM₁₀

The annual average of PM₁₀ at PU Pokhara station was found to be 32.79 µg/m³. Histogram of hourly average PM₁₀ is shown in the figure below.

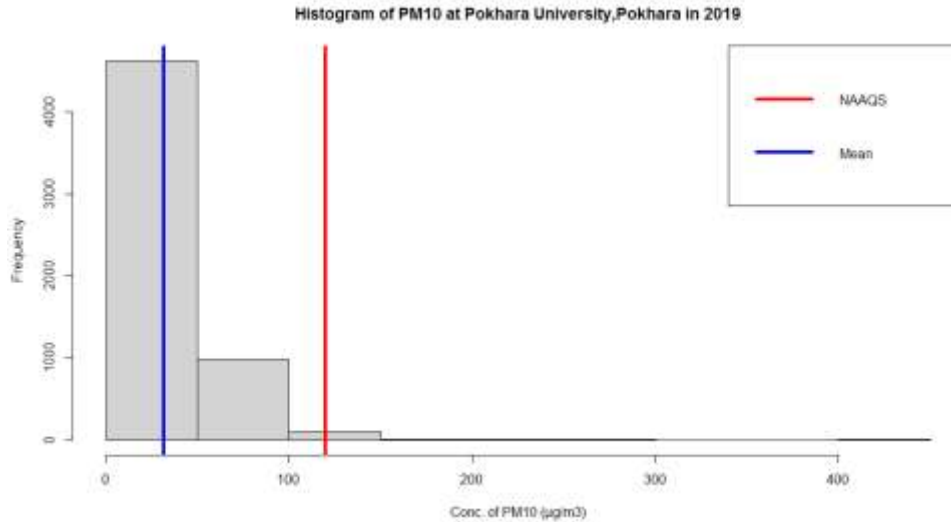


Figure 66 : Histogram for the ambient concentration of PM₁₀.

Daily average of PM₁₀:

Daily average concentration of PM₁₀ was high during January and was found low during August.

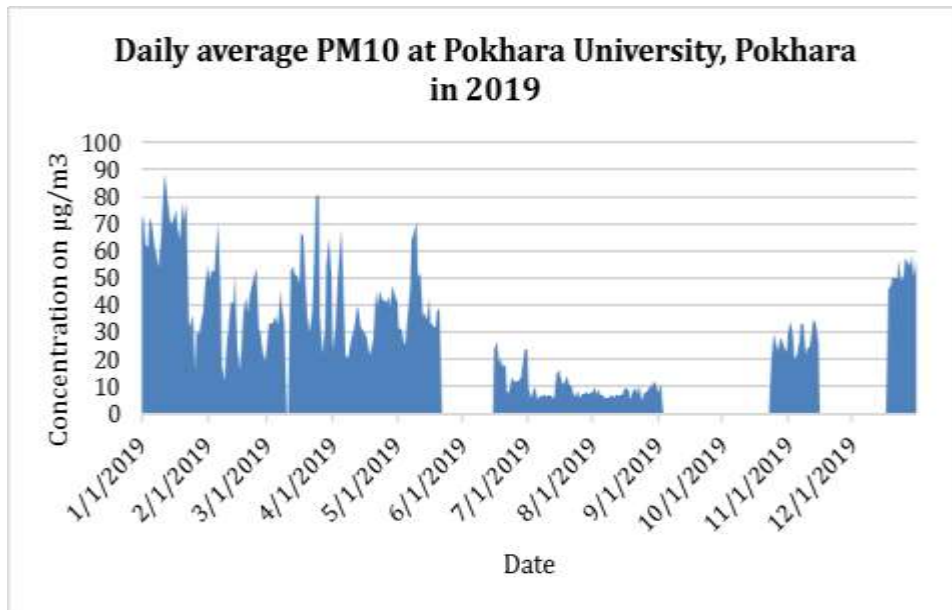


Figure 67: Daily average of PM₁₀

Monthly average of PM₁₀

The highest and the lowest concentration of PM₁₀ was found during January and August-September respectively. The mean value for those months were found to be 59.51 and 7.93 $\mu\text{g}/\text{m}^3$ respectively.

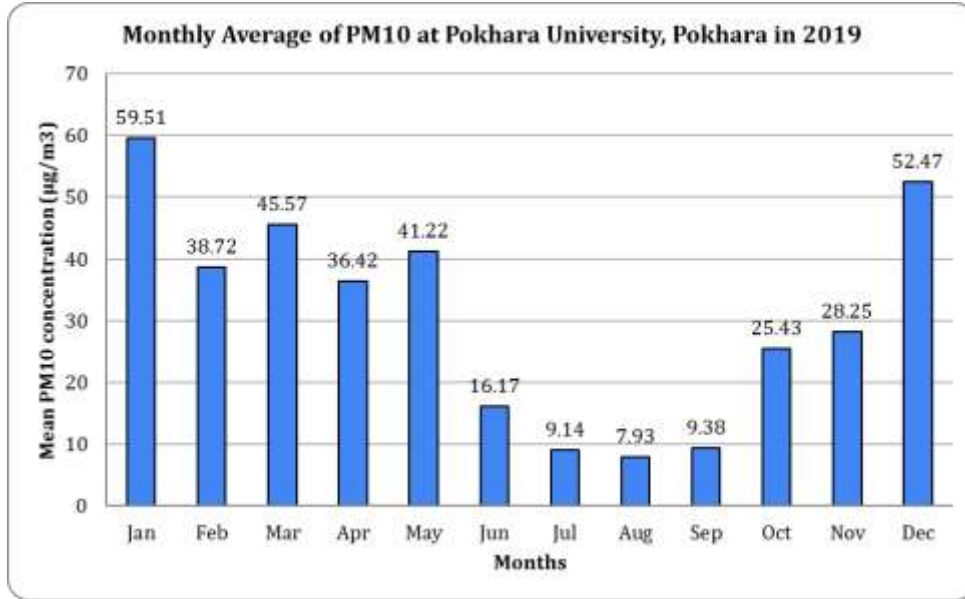


Figure 68: Monthly average of PM₁₀

Monthly Variation of PM₁₀

Variation in concentration of PM₁₀ was found more during January whereas low during August.

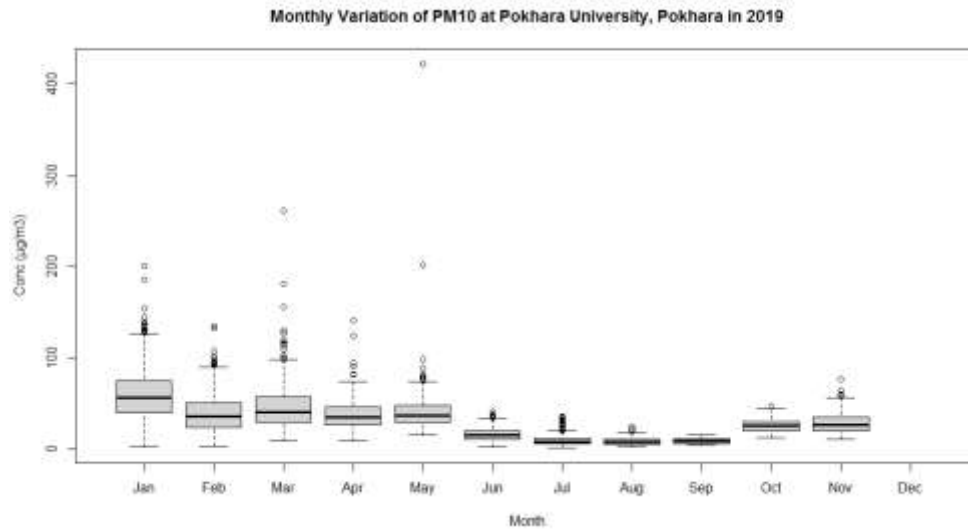


Figure 69: Monthly Variation of PM₁₀

Seasonal variation of average PM₁₀ concentration:

Ambient concentration of average PM₁₀ during winter, pre- monsoon, monsoon and post monsoon can be shown below. The concentration of PM₁₀ was found the highest during winter (52.8 µg/m³) and lowest during monsoon season (11.08 µg/m³).

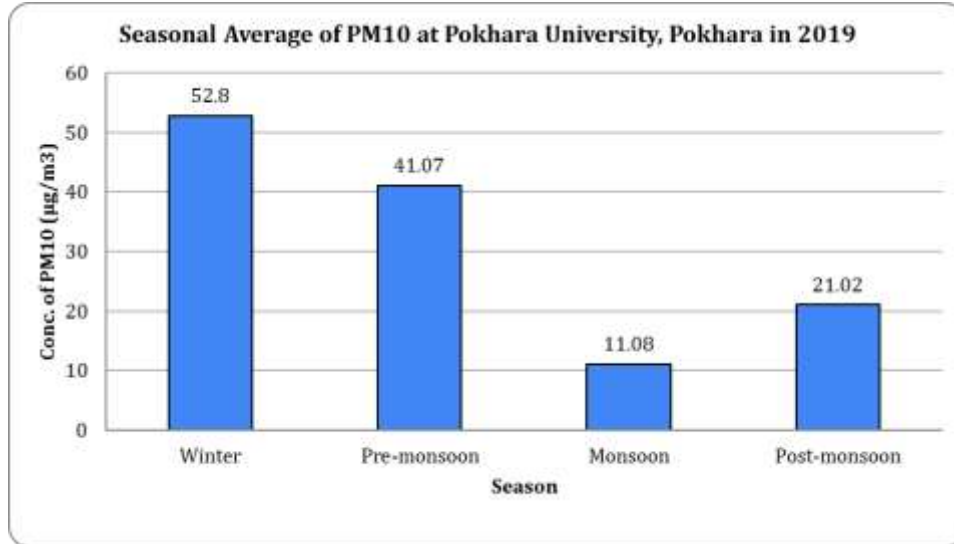


Figure 70: Seasonal variation of PM₁₀.

Diurnal variation of average PM₁₀ concentration

The diurnal variation of average PM₁₀ concentrations can be shown in the figure below. The variation in PM₁₀ concentration was high at around 6 am and low at 11am to 1 pm.

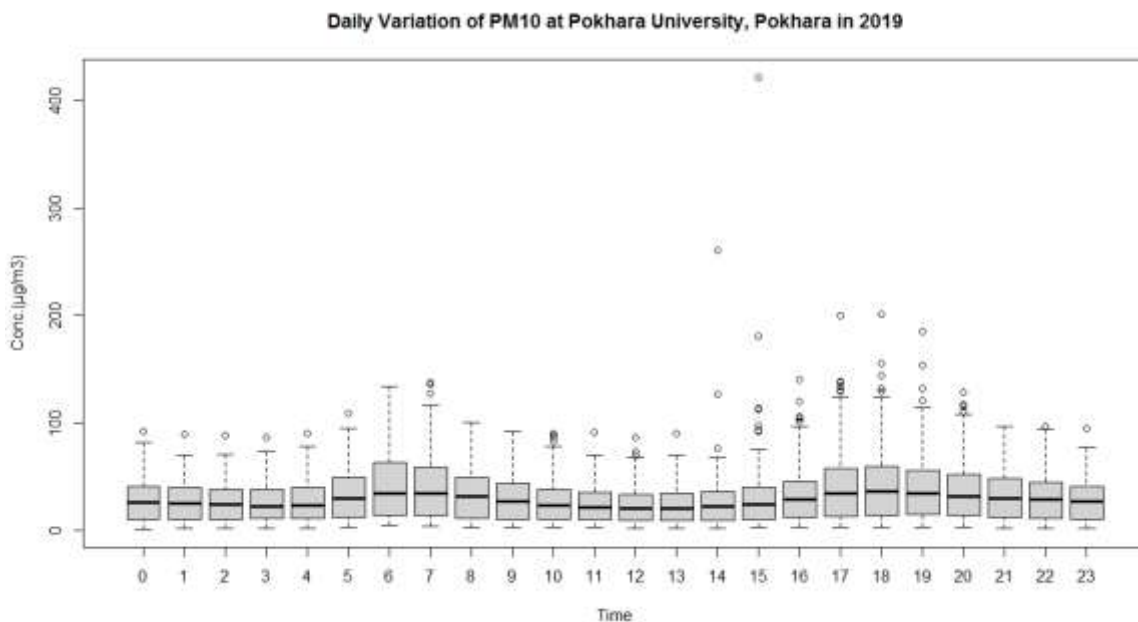


Figure 71: Diurnal variation of PM₁₀ concentration

Compliance status of PM₁₀

The total days of PM₁₀ monitored in the year 2019 counts 255 of which none of the day exceed the NAAQS guideline.

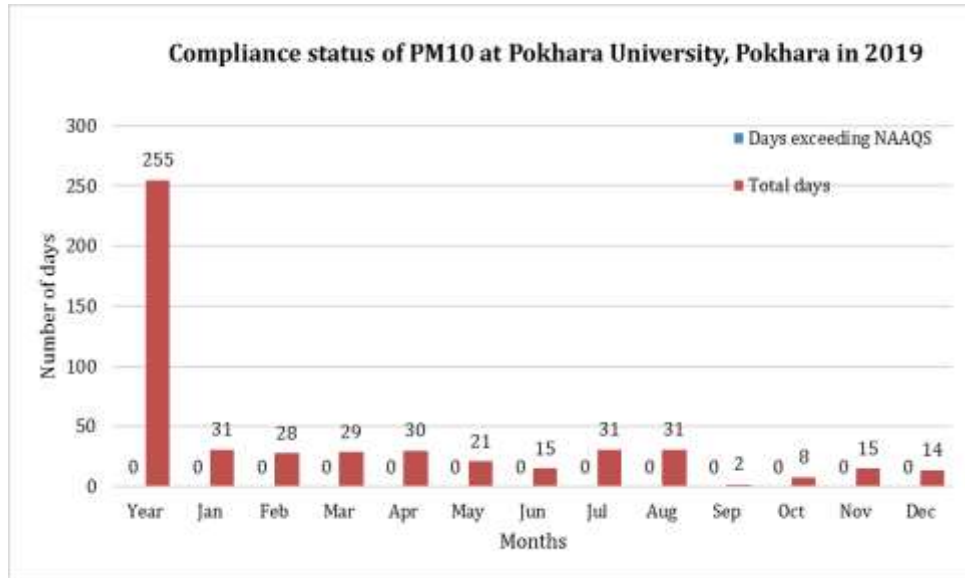


Figure 72: Compliance status of PM₁₀

2.3.5. Temporal variation of TSP

Annual average of TSP

The annual average of TSP at PU Pokhara station was found to be 49.14 $\mu\text{g}/\text{m}^3$. Histogram of hourly average TSP is shown in the figure below.

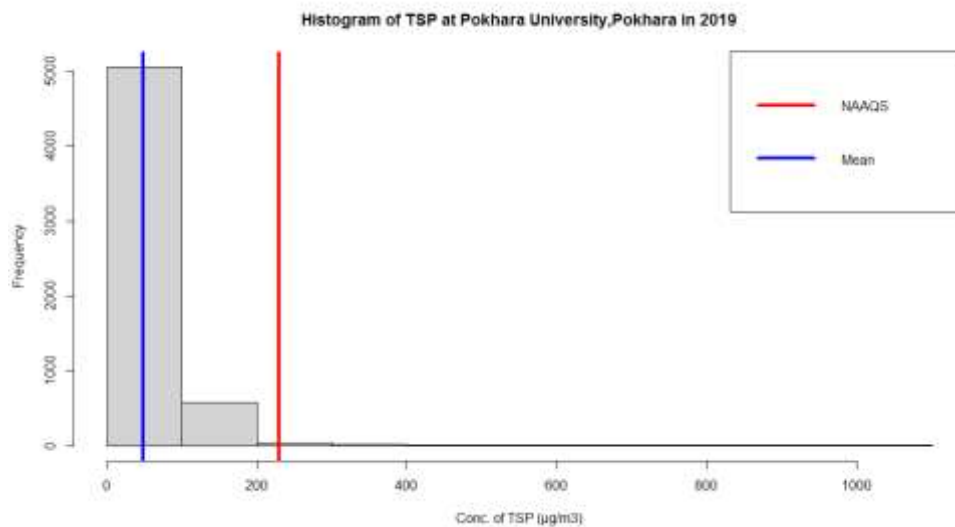


Figure 73 : Histogram for the ambient concentration of TSP

Daily average of TSP

Daily average concentration of TSP was high during January and was found low during July-August.

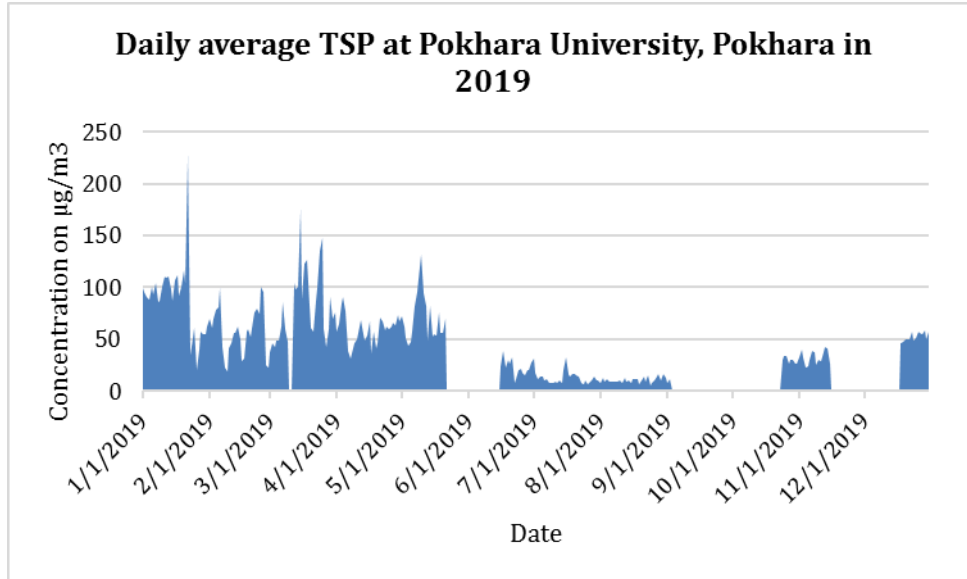


Figure 74: Daily average of TSP

Monthly average of TSP

The highest and the lowest concentration of TSP was found during January and September respectively. The mean value for those months were found to be 88.99 and 9.77 µg/m³ respectively.

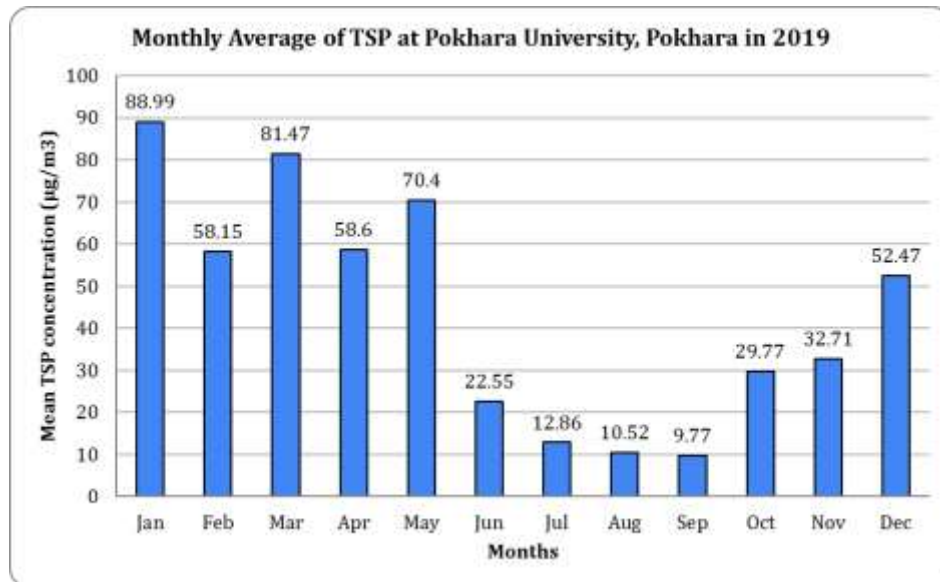


Figure 75: Monthly Average of TSP

Monthly Variation of TSP

Variation in concentration of TSP is more during January and less during September as shown in figure below.

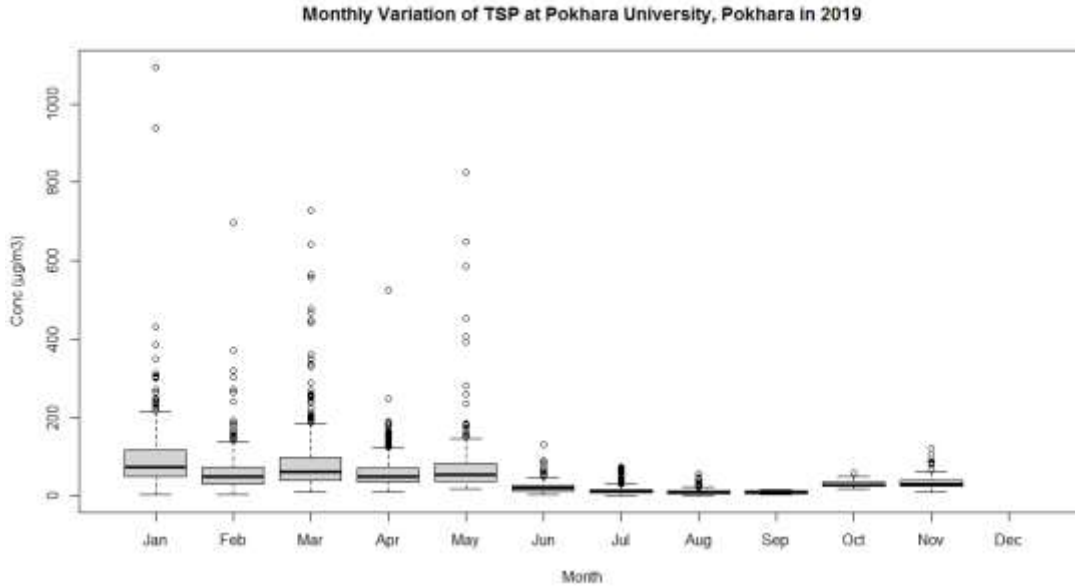


Figure 76: Monthly Variation of TSP.

Seasonal variation of average TSP

Ambient concentration of average TSP during winter, pre- monsoon, monsoon and post monsoon can be shown below. The concentration of TSP was found higher during winter (77.2 µg/m³) than monsoon season (15.31 µg/m³).

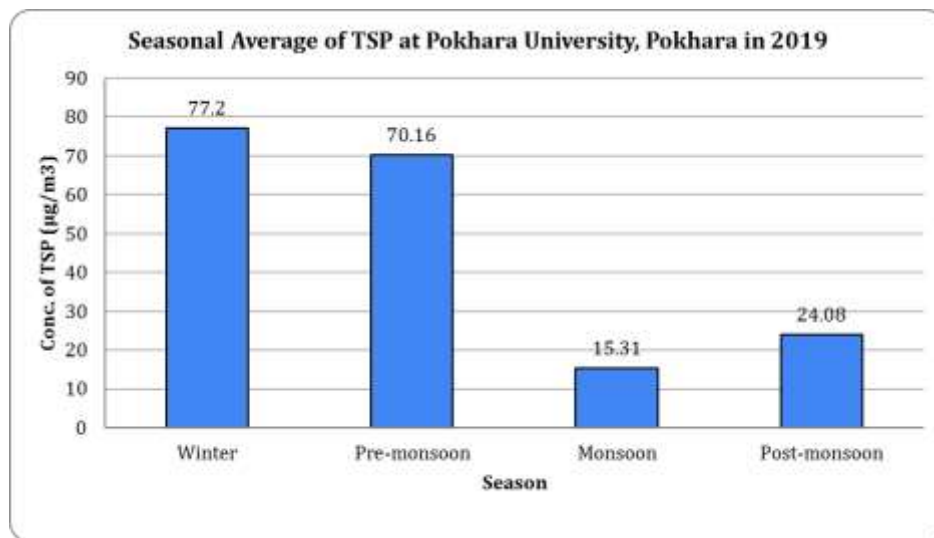


Figure 77: Seasonal variation of TSP

Diurnal variation of average TSP

The diurnal variation of average TSP concentrations can be shown in the figure below. The variation in TSP concentration was high during 4-5pm and low during morning.

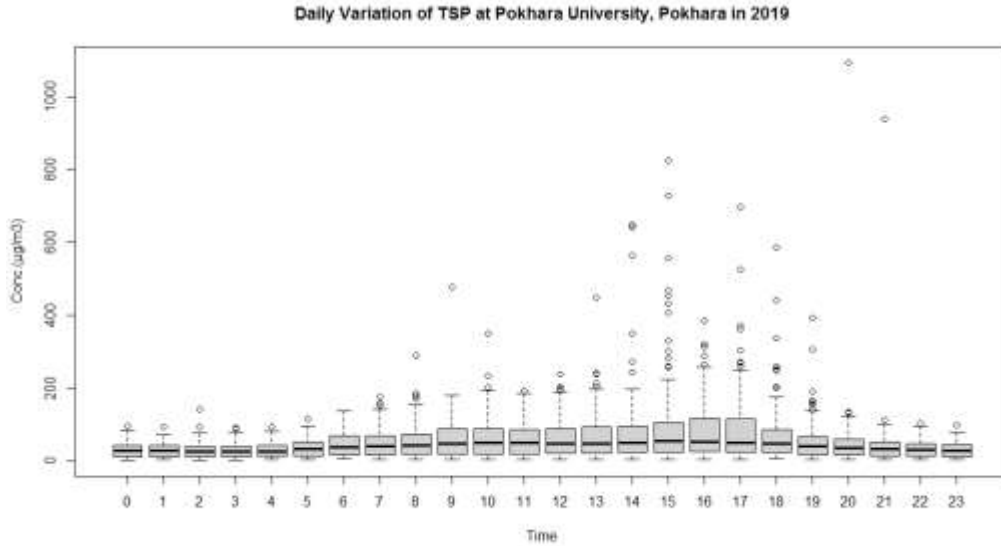


Figure 78: Diurnal Variation of TSP

Compliance status of TSP

The total days of TSP monitored in the year 2019 counts 255 of which none of the days exceed the NAAQS guideline.

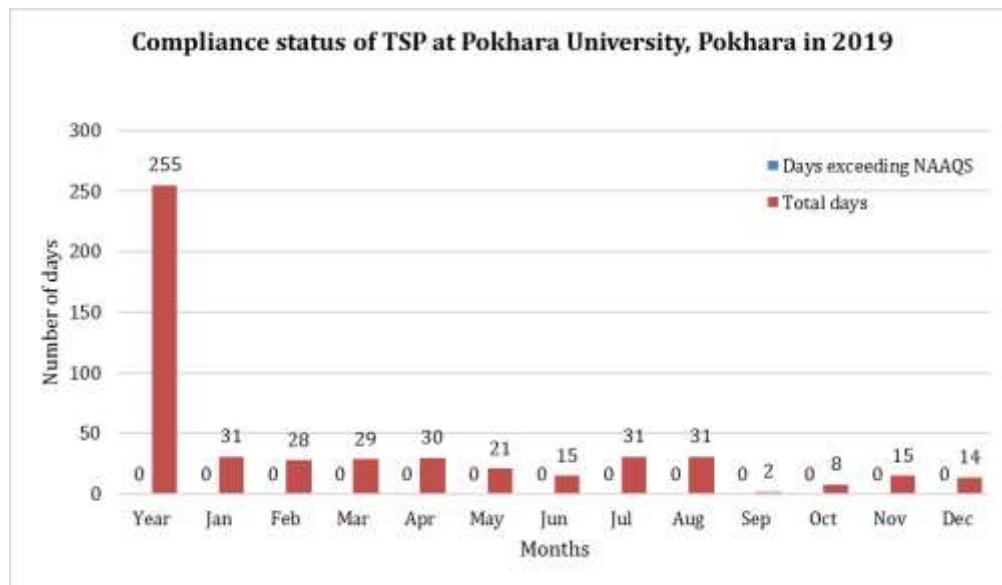


Figure 79: Compliance status of TSP

2.4. Temporal variation of 2020

2.4.1. Annual average of PM₁, PM_{2.5}, PM₁₀ and TSP

The annual average of PM₁, PM_{2.5}, PM₁₀ and TSP of the PU Pokhara monitoring station was calculated as shown in figure below.

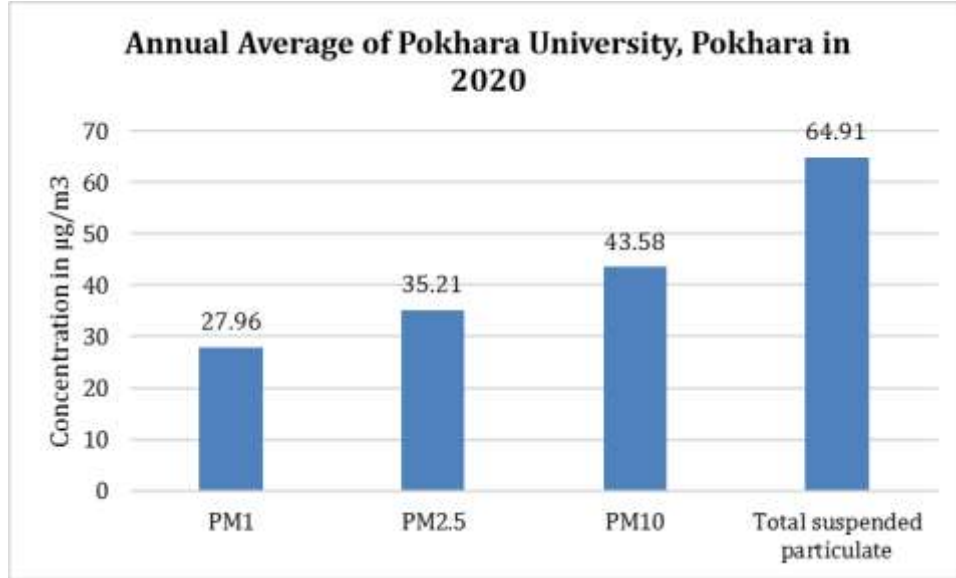


Figure 80: Annual average of PM₁, PM_{2.5}, PM₁₀ and TSP in 2020

2.4.2. Temporal variation of PM₁

Annual average of PM₁

The annual average of PM₁ at PU Pokhara station was found to be 27.96 µg/m³. Histogram of hourly average PM₁ is shown in the figure below.

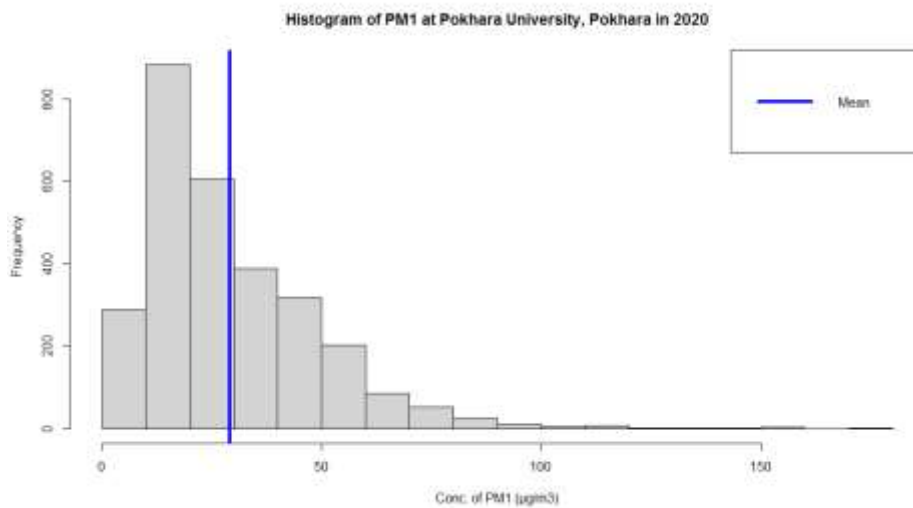


Figure 81 : Histogram of PM₁.

Daily average of PM₁

Daily average concentration of PM₁ was high during April and was found low during May.

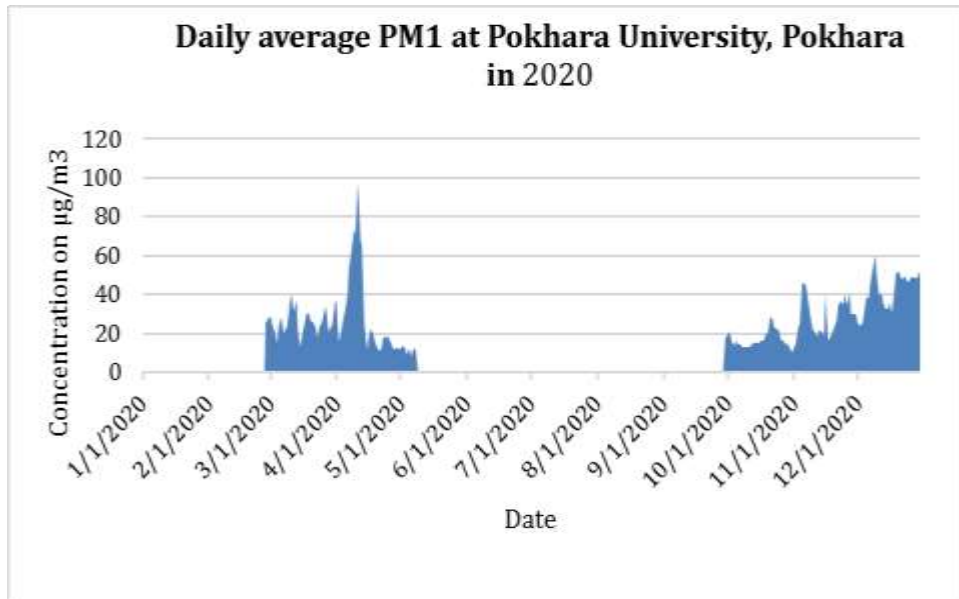


Figure 82: Daily average of PM₁

Monthly average of PM₁

The highest and the lowest concentration of PM₁ was found during December and May respectively. The mean value for those months were found to be 42.62 and 11.45 µg/m³ respectively.

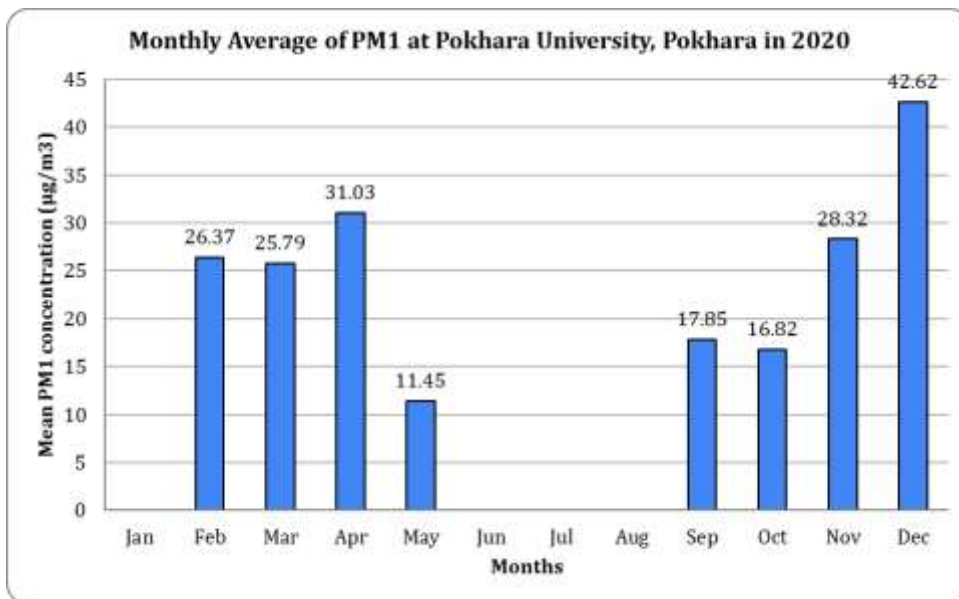


Figure 83: Monthly Average of PM₁

Monthly Variation of PM₁

Variation in concentration of PM₁ was found more during April whereas low during May.

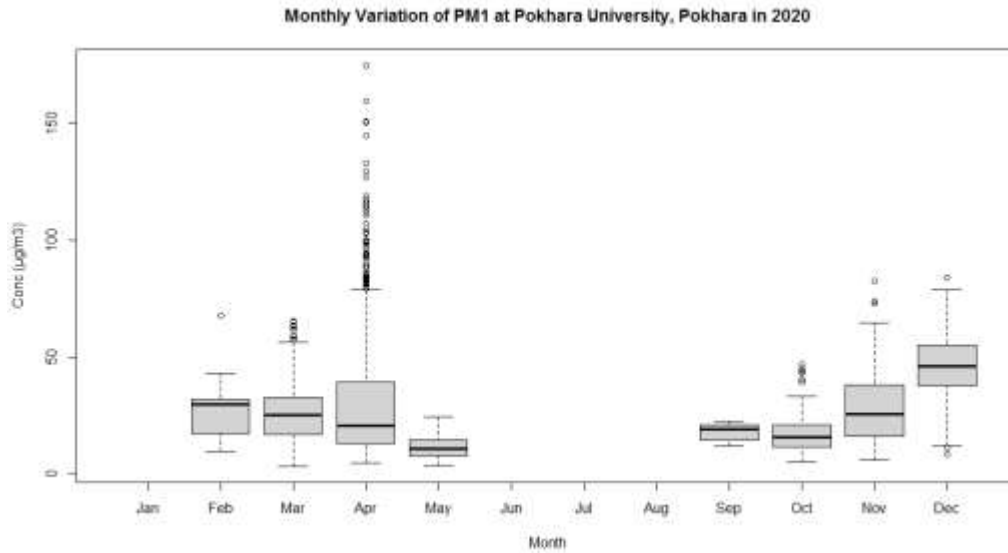


Figure 84: Monthly Variation of PM₁

Seasonal variation of average PM₁

Ambient concentration of average PM₁ during winter, pre-monsoon and post-monsoon can be shown in the figure below. The concentration of PM₁ was found high during pre-monsoon (22.76 µg/m³) and low during post-monsoon season (20.99 µg/m³).

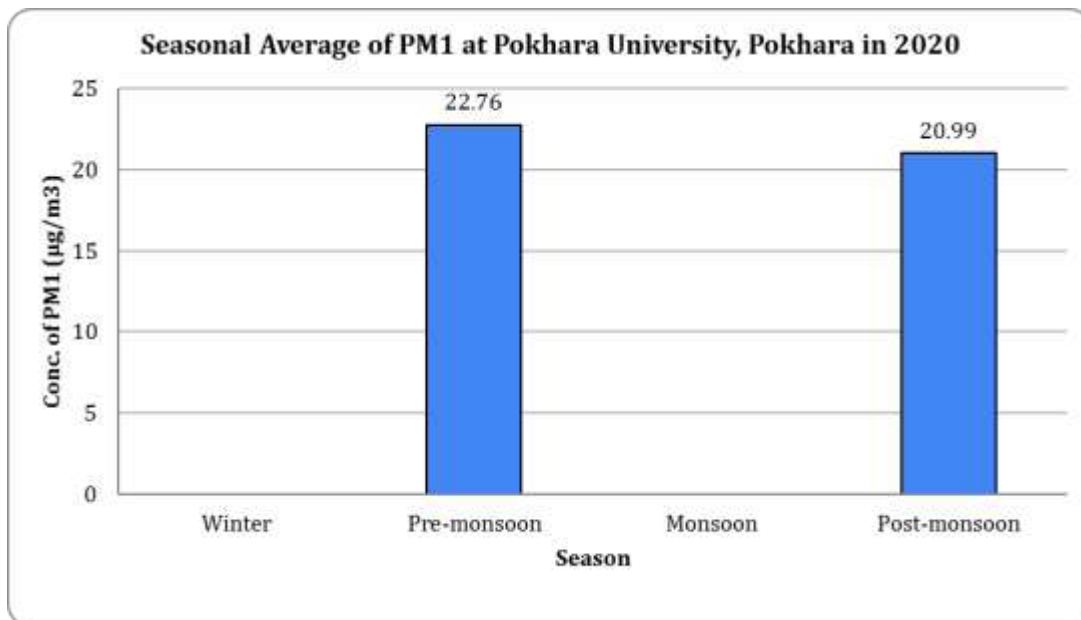


Figure 85: Seasonal variation of PM₁

Diurnal variation of average PM₁ concentration

The diurnal variation of average PM₁ concentrations can be shown in the figure below. The variation in PM₁ concentration was high during 6pm and low during 12 pm.

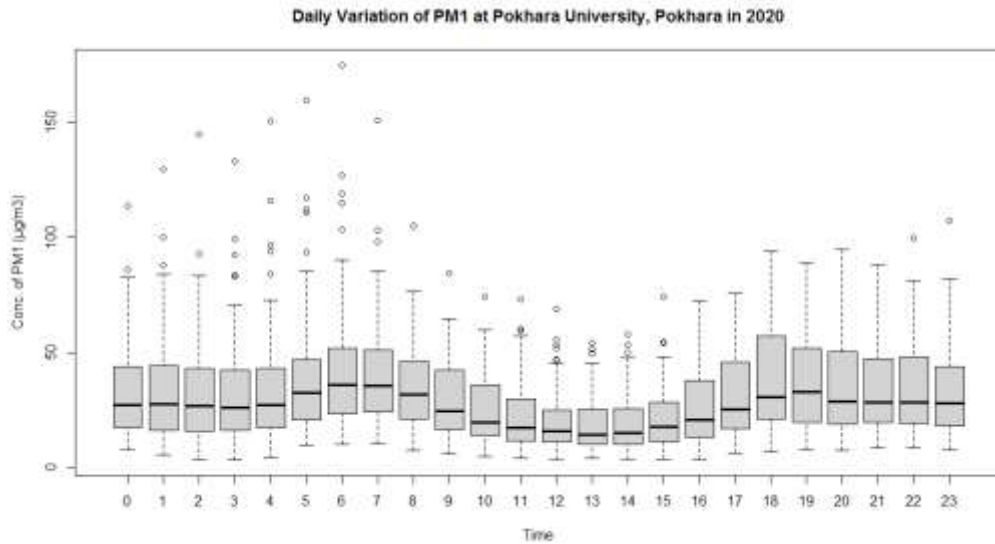


Figure 86: Diurnal variation of PM₁

2.4.3. Temporal variation of PM_{2.5}

Annual average of PM_{2.5}

The annual average of PM_{2.5} at PU Pokhara station was found to be 35.21 µg/m³. Histogram of hourly average PM_{2.5} is shown in the figure below.

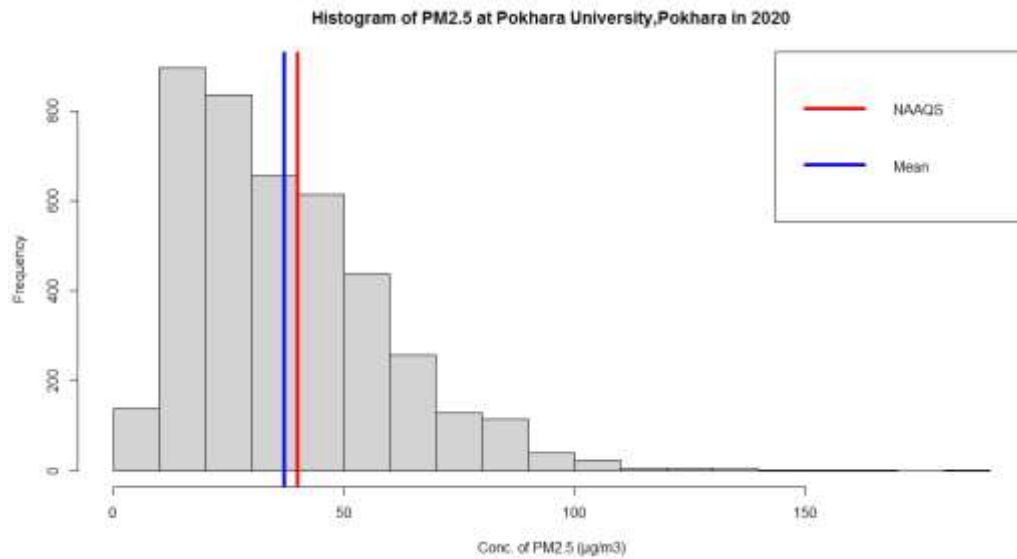


Figure 87 : Histogram of PM_{2.5}

Daily average of PM_{2.5}

Daily average concentration of PM_{2.5} was high during April and low during May.

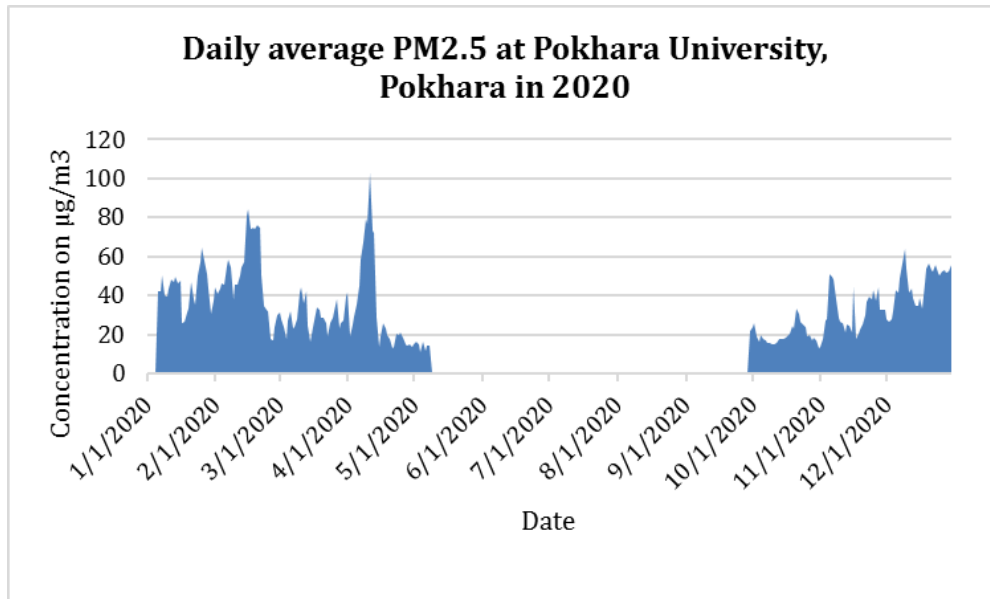


Figure 88: Daily average of PM_{2.5}

Monthly average of PM_{2.5}

The highest and the lowest concentration of PM_{2.5} was found during February and May respectively. The mean value for those months were found to be 50.23 and 14.1 µg/m³ respectively.

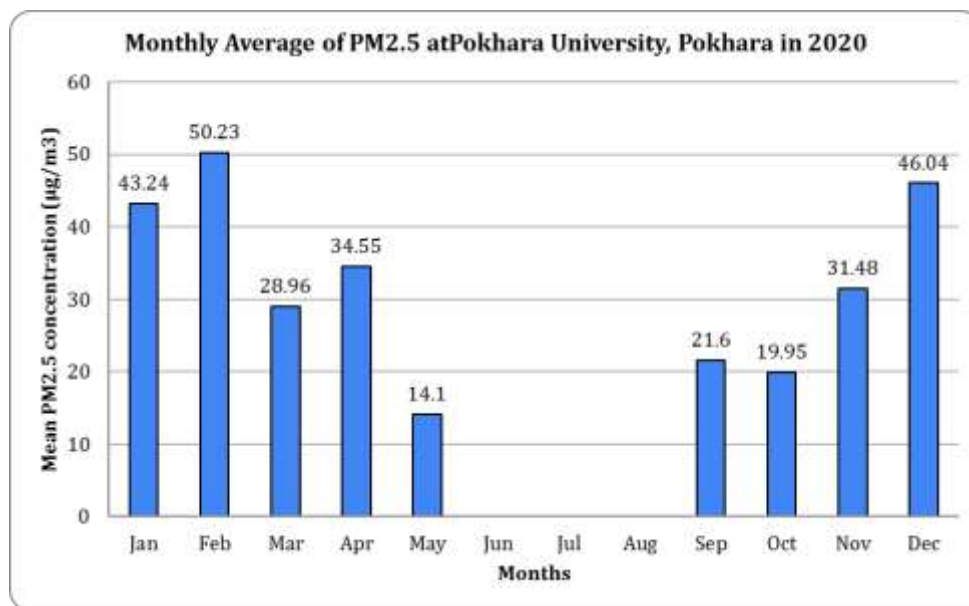


Figure 89: Monthly Average of PM_{2.5}

Monthly Variation of PM_{2.5}

Variation in concentration of PM_{2.5} was found more during February and less during September.

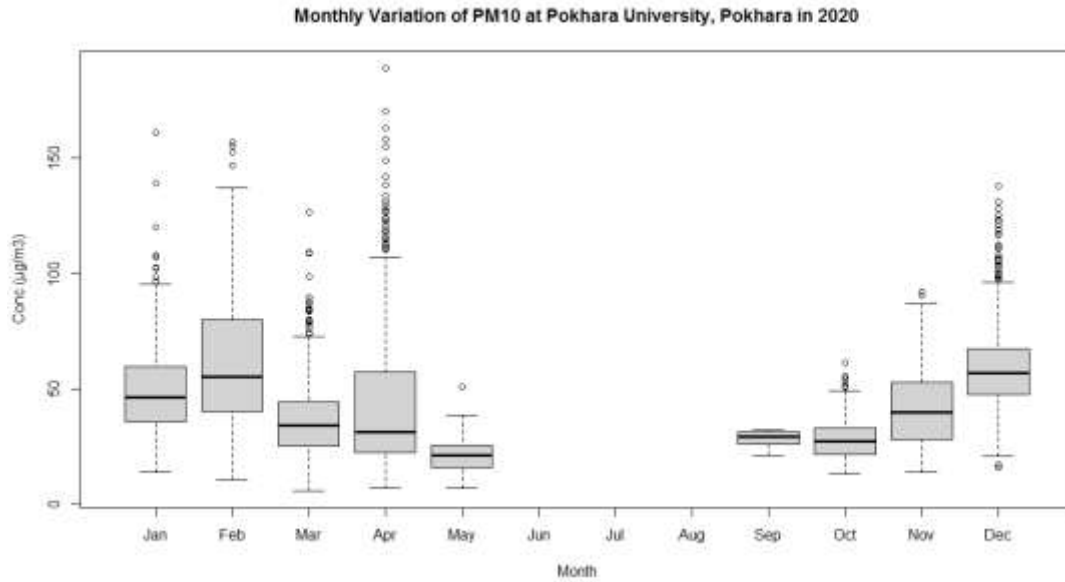


Figure 90: Monthly Variation of PM_{2.5}

Seasonal variation of average PM_{2.5} concentration

Ambient concentration of average PM_{2.5} during winter, pre-monsoon and post-monsoon. The concentration of PM_{2.5} was found high during winter (48.65 µg/m³) and low during post-monsoon season (24.34 µg/m³).

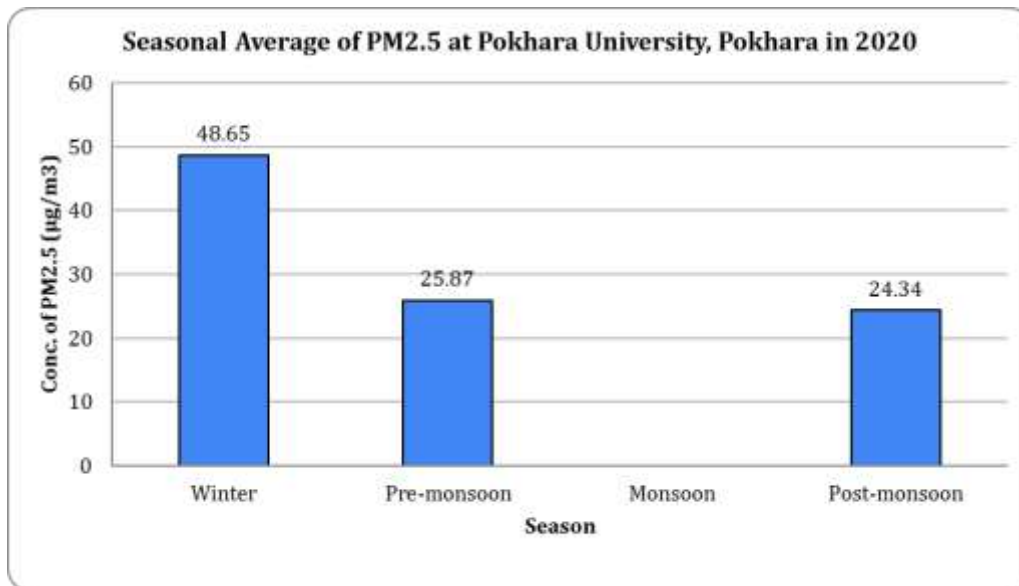


Figure 91: Seasonal variation of PM_{2.5}

Diurnal variation of average PM_{2.5}

The diurnal variation of average PM_{2.5} concentrations can be shown in the figure below. The variation in PM_{2.5} concentration was high at around 5-6 pm and low 1 pm.

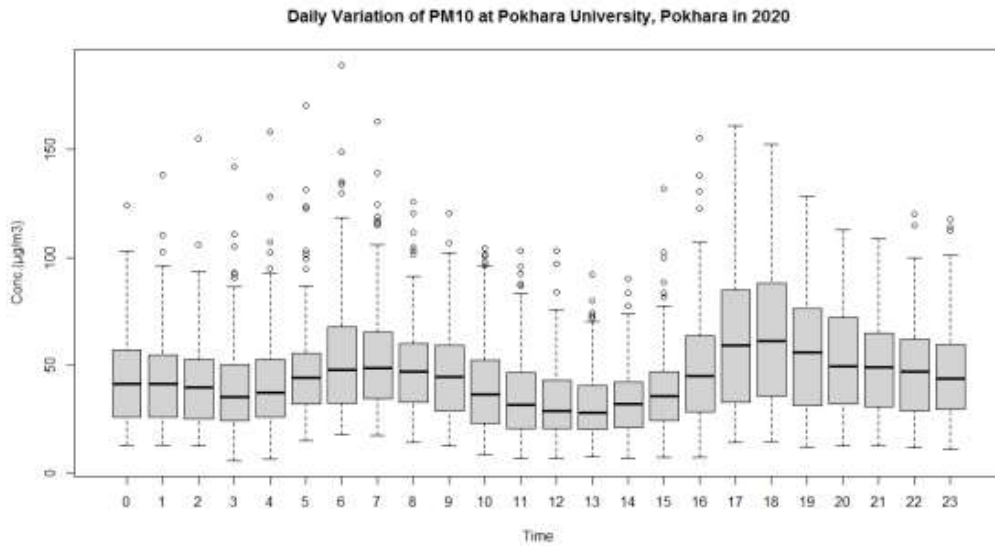


Figure 92: Diurnal variation of PM_{2.5}

Compliance status of PM_{2.5}

The total days of PM_{2.5} monitored in the year 2020 counts 216, of which 76 days exceed the NAAQS guideline.

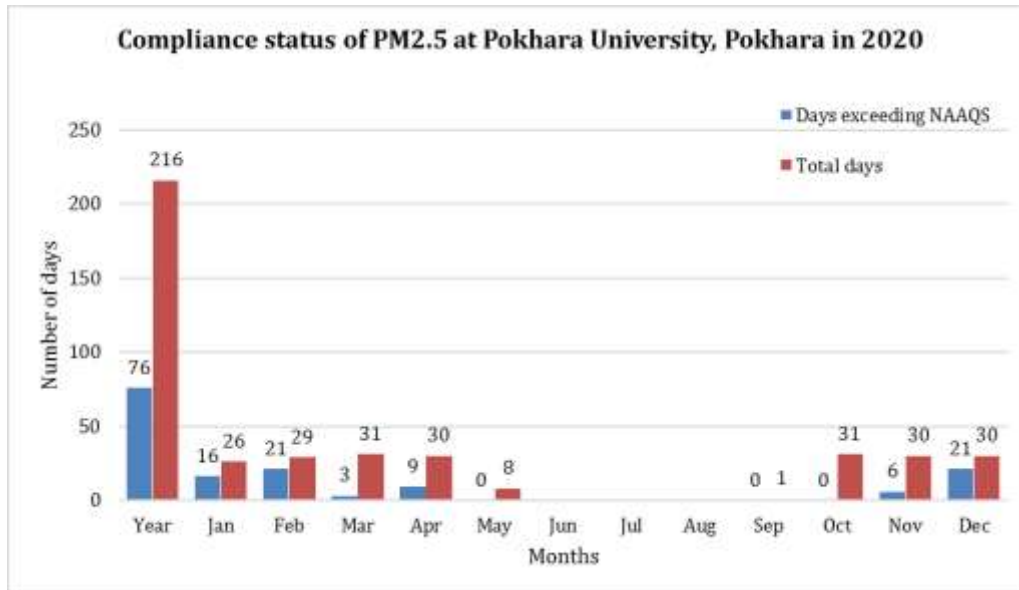


Figure 93: Compliance status of PM_{2.5}

2.4.4. Temporal variation of PM₁₀

Annual average of PM₁₀

The annual average of PM₁₀ at PU Pokhara station was found to be 43.58 µg/m³. Histogram of hourly average PM₁₀ is shown in the figure below.

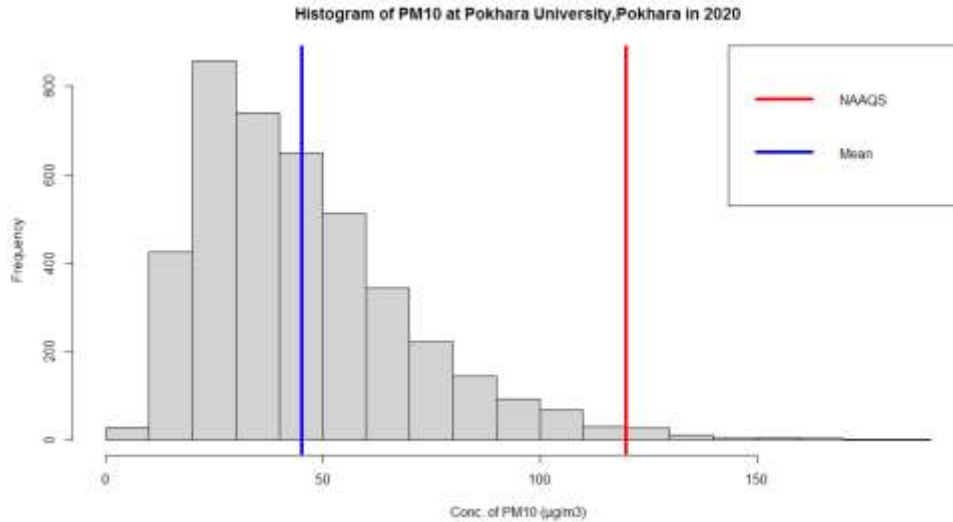


Figure 94 : Histogram for the ambient concentration of PM₁₀.

Daily average of PM₁₀

Daily average concentration of PM₁₀ was high during April and was found low during May.

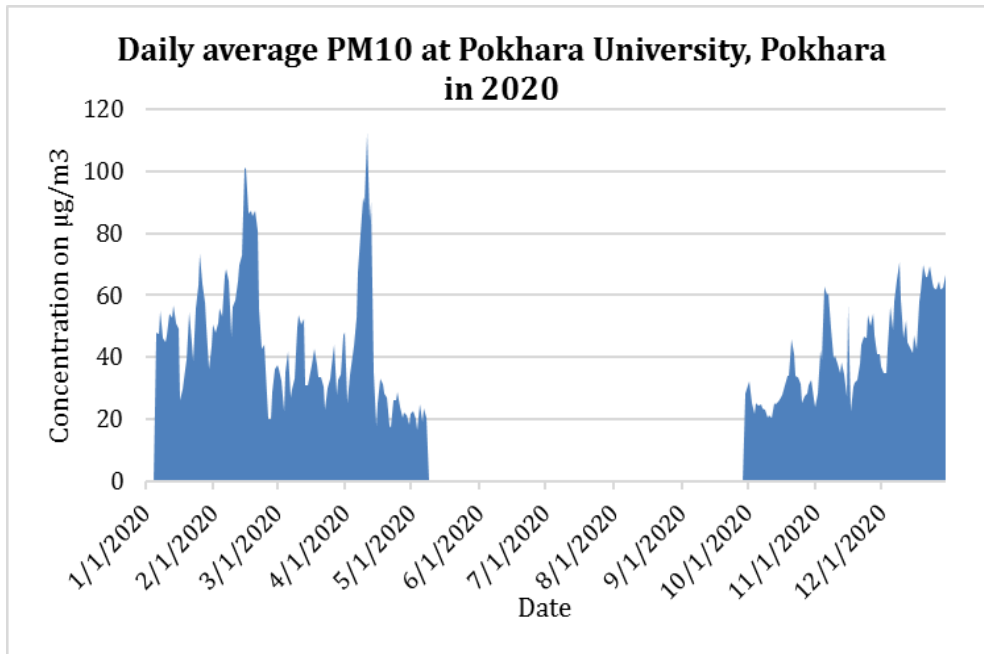


Figure 95: Daily average of PM₁₀

Monthly average of PM₁₀

The highest and the lowest concentration of PM₁₀ was found during February and August respectively. The mean value for those months were found to be 59.93 and 21.02 μg/m³ respectively.

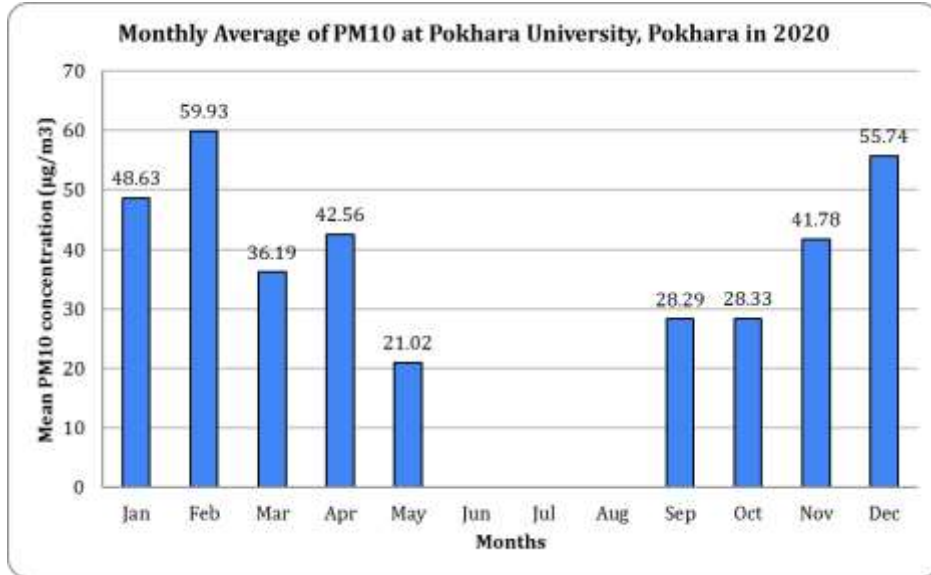


Figure 96: Monthly average of PM₁₀

Monthly Variation of PM₁₀

Variation in concentration of PM₁₀ was found more during February and less during September.

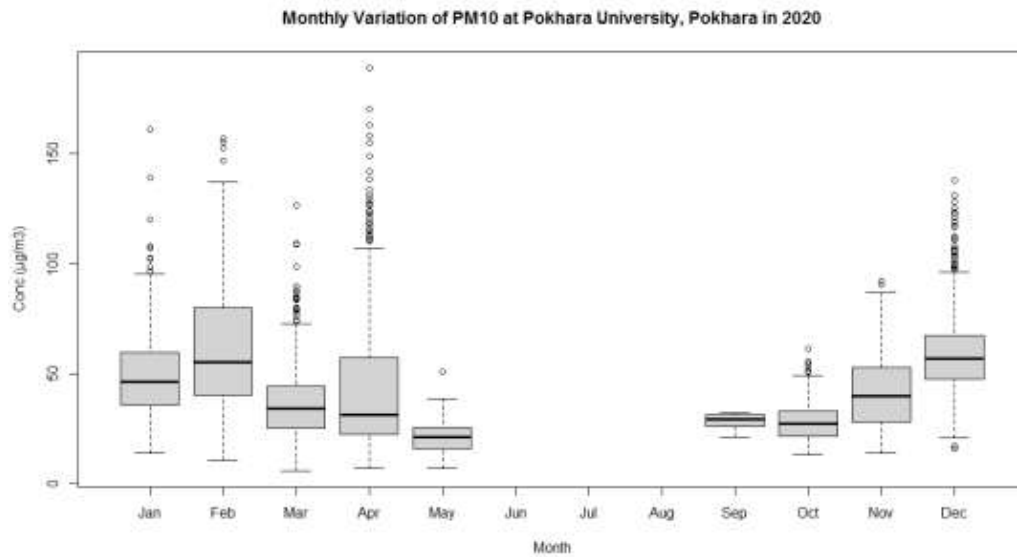


Figure 97: Monthly Variation of PM₁₀

Seasonal variation of average PM₁₀ concentration:

Ambient concentration of average PM₁₀ during winter, pre-monsoon and monsoon as shown in the figure below. The concentration of PM₁₀ was found higher during winter (53.67 µg/m³) and low during post-monsoon season (32.8 µg/m³).

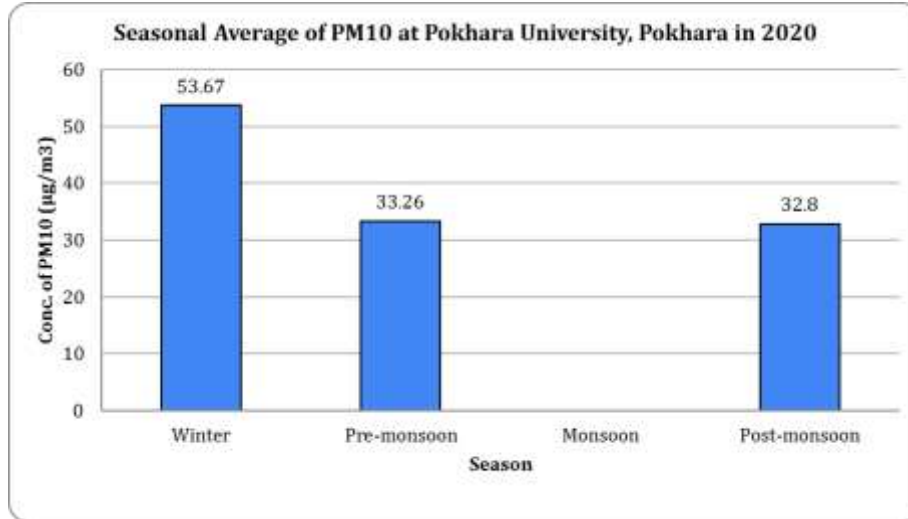


Figure 98: Seasonal variation of PM₁₀.

Diurnal variation of average PM₁₀

The diurnal variation of average PM₁₀ concentrations can be shown in the figure below. The variation in PM₁₀ concentration was high at around 5-6 pm and low at 1 am.

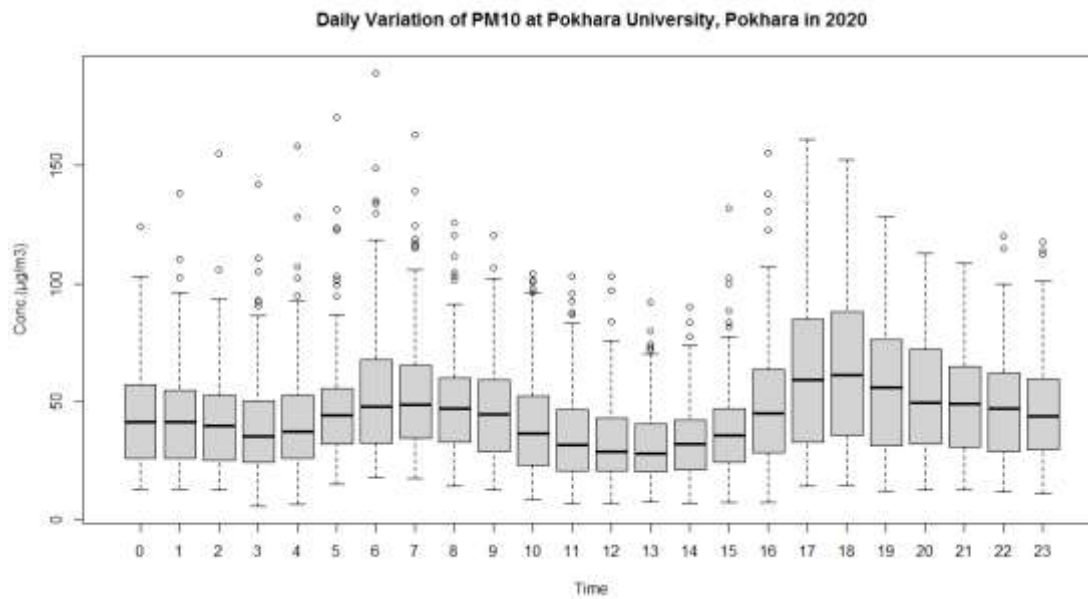


Figure 99: Diurnal variation of PM₁₀ concentration

Compliance status of PM₁₀

The total days of PM₁₀ monitored in the year 2020 counts 216 of which only one day exceed the NAAQS guideline.

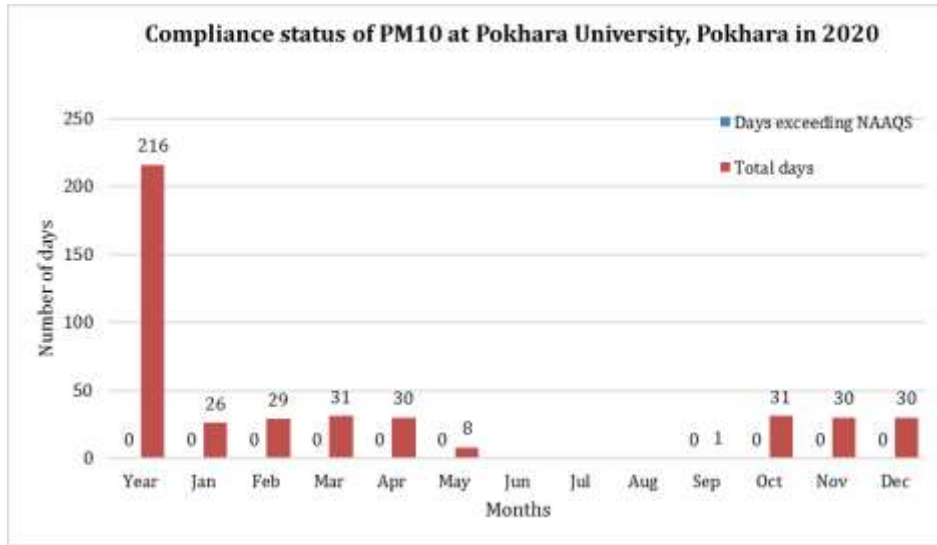


Figure 100: Compliance status of PM₁₀

2.4.5. Temporal variation of TSP

Annual average of TSP

The annual average of TSP at PU Pokhara station was found to be 64.91 $\mu\text{g}/\text{m}^3$. Histogram of hourly average TSP is shown in the figure below.

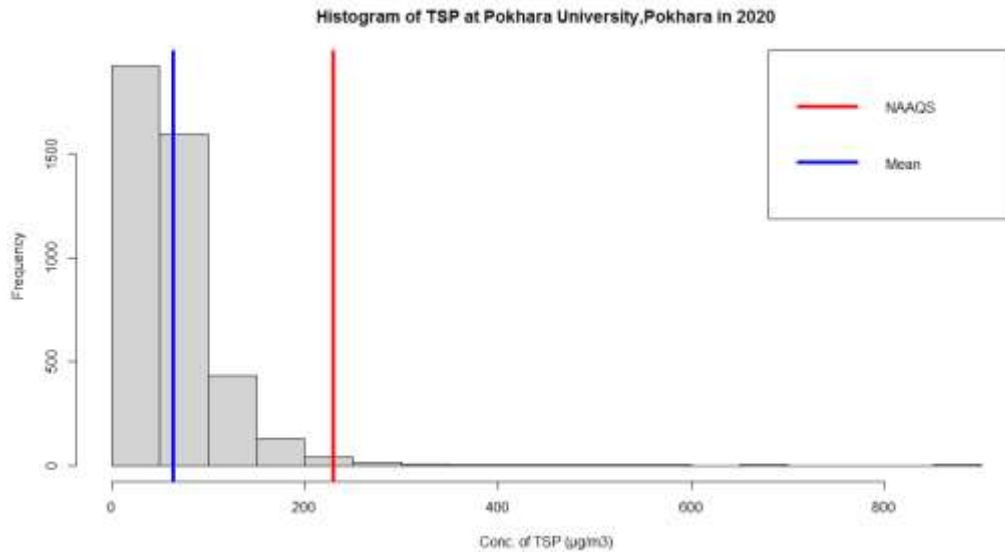


Figure 101 : Histogram of TSP

Daily average of TSP:

Daily average concentration of TSP was high during April and was found low during May .

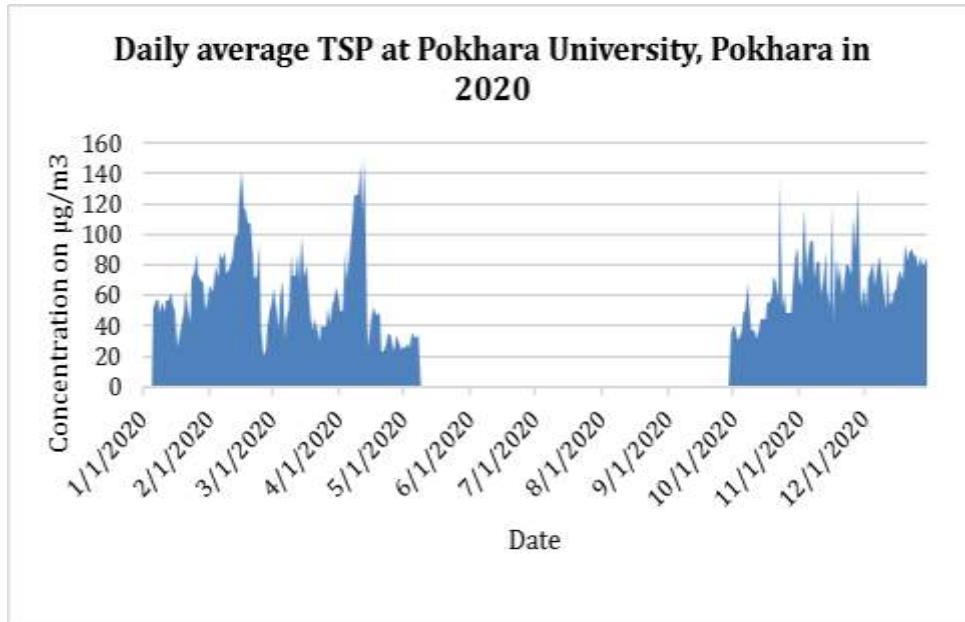


Figure 102: Daily average of TSP

Monthly average of TSP

The highest and the lowest concentration of TSP was found during February and May respectively. The mean value for those months were found to be 80.44 and 29.81 $\mu\text{g}/\text{m}^3$ respectively.

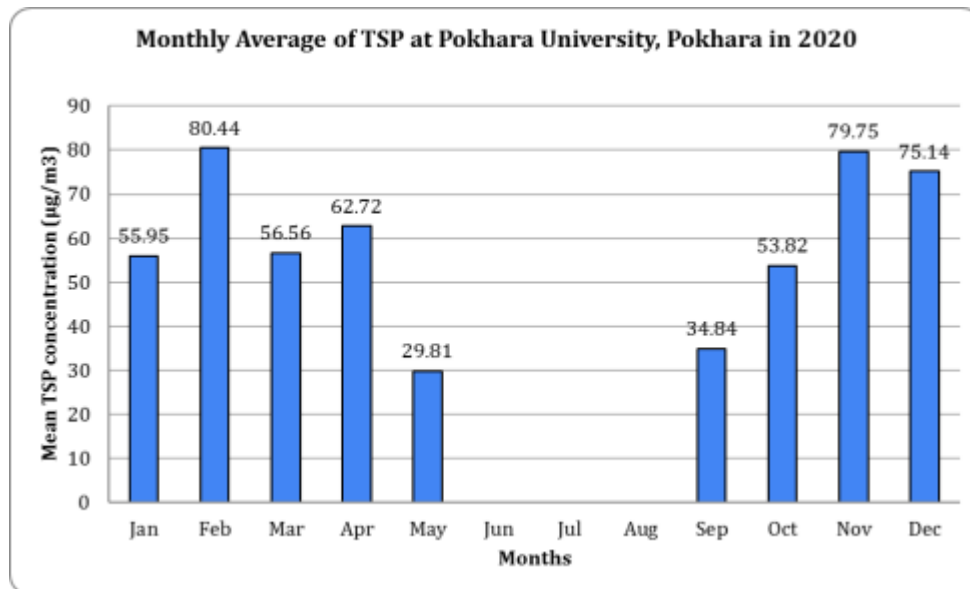


Figure 103: Monthly Average of TSP

Monthly Variation of TSP

Variation in concentration of TSP was found more during April and less during September.

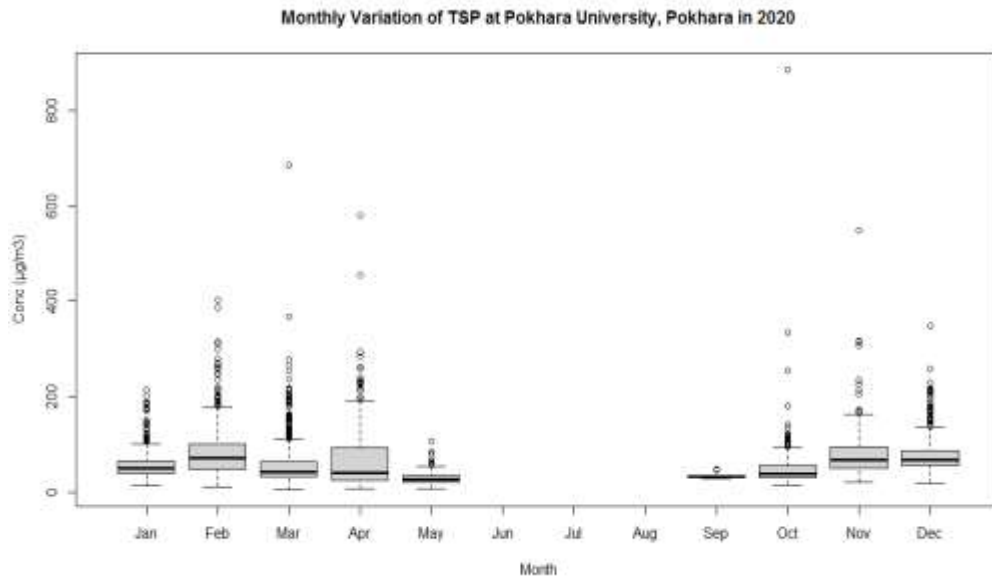


Figure 104: Monthly Variation of TSP.

Seasonal variation of average TSP concentration

Ambient concentration of average TSP during winter, pre-monsoon and post-monsoon as shown in the figure below. The concentration of TSP was found higher during winter ($62.95 \mu\text{g}/\text{m}^3$) and low during post-monsoon season ($49.7 \mu\text{g}/\text{m}^3$).

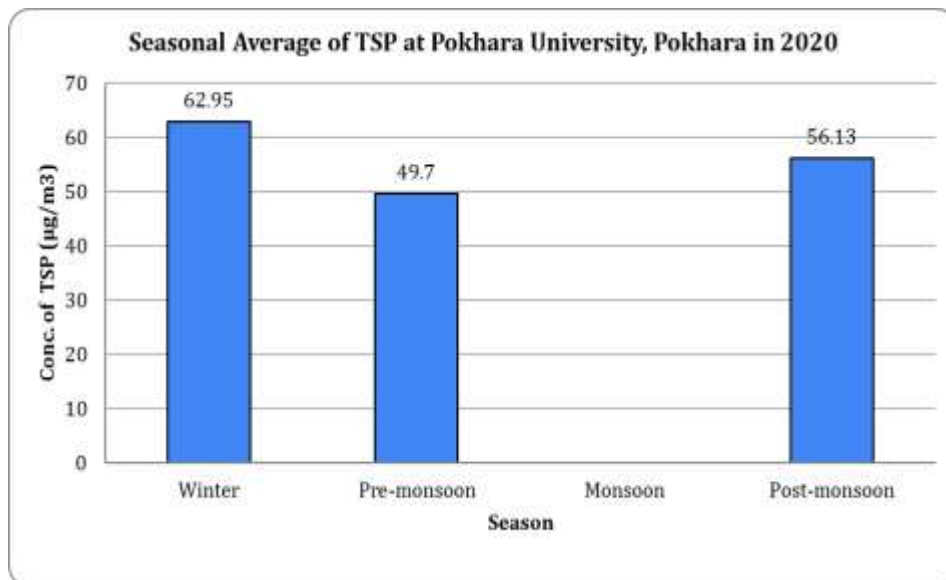


Figure 105: Seasonal variation of TSP

Diurnal variation of average TSP concentration

The diurnal variation of average TSP concentrations can be shown in the figure below. The variation in TSP concentrations was high at around 4-5 pm and low during morning time.

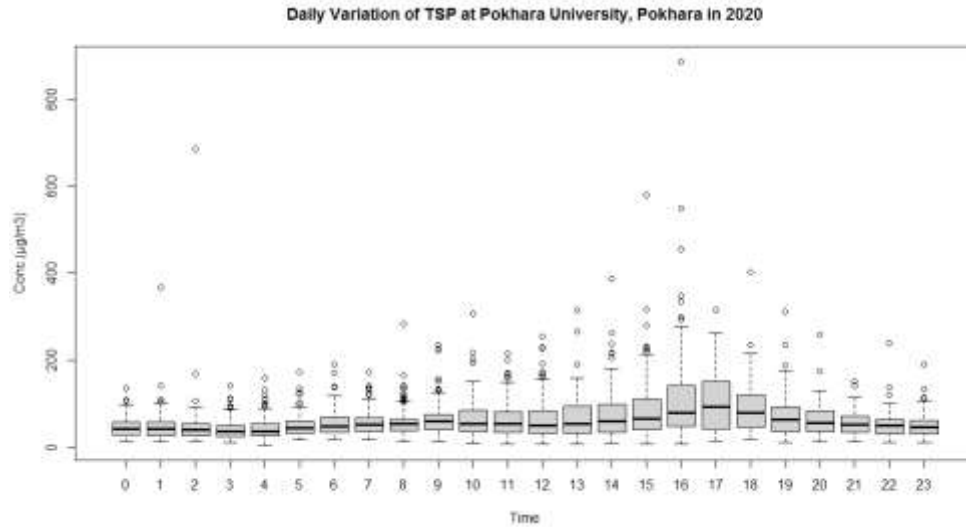


Figure 106: Diurnal Variation of TSP

Compliance status of TSP

The total days of TSP monitored in the year 2020 counts 216 of which none of the days exceed the NAAQS guideline.

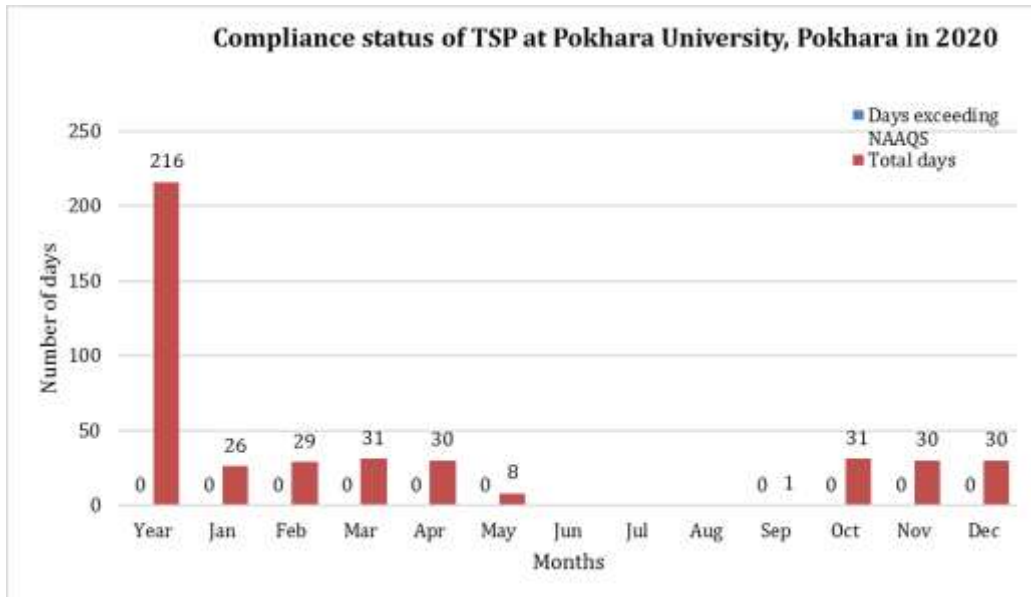


Figure 107: Compliance status of TSP

Annex

PM1

Date	Value	Date	Value	Date	Value	Date	Value
1/1/2017		1/1/2018	39.95	1/1/2019	52.81	1/1/2020	
1/2/2017		1/2/2018	35.53	1/2/2019	56.36	1/2/2020	
1/3/2017		1/3/2018	36.35	1/3/2019	46.52	1/3/2020	
1/4/2017		1/4/2018	36.07	1/4/2019	45.54	1/4/2020	
1/5/2017		1/5/2018	36.99	1/5/2019	53.92	1/5/2020	
1/6/2017		1/6/2018	41.49	1/6/2019	50.59	1/6/2020	
1/7/2017		1/7/2018	39.90	1/7/2019	44.67	1/7/2020	
1/8/2017		1/8/2018	44.21	1/8/2019	41.02	1/8/2020	
1/9/2017		1/9/2018	52.05	1/9/2019	37.87	1/9/2020	
1/10/2017		1/10/2018	57.65	1/10/2019	48.38	1/10/2020	
1/11/2017		1/11/2018	48.24	1/11/2019	64.47	1/11/2020	
1/12/2017		1/12/2018	46.22	1/12/2019	72.10	1/12/2020	
1/13/2017		1/13/2018	43.85	1/13/2019	63.85	1/13/2020	
1/14/2017		1/14/2018	53.38	1/14/2019	57.70	1/14/2020	
1/15/2017		1/15/2018	53.61	1/15/2019	56.46	1/15/2020	
1/16/2017		1/16/2018	45.44	1/16/2019	56.03	1/16/2020	
1/17/2017		1/17/2018	44.87	1/17/2019	57.69	1/17/2020	
1/18/2017		1/18/2018	41.12	1/18/2019	54.23	1/18/2020	
1/19/2017		1/19/2018	45.06	1/19/2019	48.61	1/19/2020	
1/20/2017		1/20/2018	46.19	1/20/2019	55.45	1/20/2020	
1/21/2017		1/21/2018	44.27	1/21/2019	51.89	1/21/2020	
1/22/2017		1/22/2018	51.48	1/22/2019	49.11	1/22/2020	
1/23/2017		1/23/2018	48.80	1/23/2019	28.46	1/23/2020	
1/24/2017		1/24/2018	35.81	1/24/2019	25.01	1/24/2020	
1/25/2017		1/25/2018	33.71	1/25/2019	28.10	1/25/2020	
1/26/2017		1/26/2018	36.08	1/26/2019	12.98	1/26/2020	
1/27/2017		1/27/2018	45.66	1/27/2019	24.94	1/27/2020	
1/28/2017		1/28/2018	60.11	1/28/2019	22.04	1/28/2020	

1/29/2017		1/29/2018	70.60	1/29/2019	27.02	1/29/2020	
1/30/2017		1/30/2018	61.71	1/30/2019	28.91	1/30/2020	
1/31/2017		1/31/2018	73.73	1/31/2019	40.46	1/31/2020	
2/1/2017		2/1/2018	70.40	2/1/2019	45.54	2/1/2020	
2/2/2017		2/2/2018	70.74	2/2/2019	40.97	2/2/2020	
2/3/2017		2/3/2018	69.98	2/3/2019	42.78	2/3/2020	
2/4/2017		2/4/2018	66.14	2/4/2019	43.42	2/4/2020	
2/5/2017		2/5/2018	64.39	2/5/2019	47.24	2/5/2020	
2/6/2017		2/6/2018	71.03	2/6/2019	56.36	2/6/2020	
2/7/2017		2/7/2018	60.02	2/7/2019	39.17	2/7/2020	
2/8/2017		2/8/2018	43.96	2/8/2019	14.77	2/8/2020	
2/9/2017		2/9/2018	39.61	2/9/2019	9.56	2/9/2020	
2/10/2017		2/10/2018	42.04	2/10/2019	20.76	2/10/2020	
2/11/2017		2/11/2018	54.88	2/11/2019	23.72	2/11/2020	
2/12/2017		2/12/2018	61.96	2/12/2019	33.23	2/12/2020	
2/13/2017		2/13/2018	42.79	2/13/2019	33.71	2/13/2020	
2/14/2017		2/14/2018	50.86	2/14/2019	44.17	2/14/2020	
2/15/2017		2/15/2018	37.54	2/15/2019	19.66	2/15/2020	
2/16/2017		2/16/2018	47.87	2/16/2019	12.69	2/16/2020	
2/17/2017		2/17/2018	54.60	2/17/2019	17.52	2/17/2020	
2/18/2017		2/18/2018	61.55	2/18/2019	32.54	2/18/2020	
2/19/2017		2/19/2018	60.58	2/19/2019	36.62	2/19/2020	
2/20/2017		2/20/2018	55.51	2/20/2019	28.31	2/20/2020	
2/21/2017		2/21/2018	56.50	2/21/2019	33.33	2/21/2020	
2/22/2017		2/22/2018	43.96	2/22/2019	37.11	2/22/2020	
2/23/2017		2/23/2018	45.76	2/23/2019	37.74	2/23/2020	
2/24/2017		2/24/2018	58.15	2/24/2019	41.56	2/24/2020	
2/25/2017		2/25/2018	59.09	2/25/2019	18.13	2/25/2020	
2/26/2017		2/26/2018	31.93	2/26/2019	16.62	2/26/2020	
2/27/2017		2/27/2018	44.16	2/27/2019	18.31	2/27/2020	
2/28/2017		2/28/2018	52.15	2/28/2019	14.50	2/28/2020	25.13
3/1/2017		3/1/2018	53.09	3/1/2019	17.94	2/29/2020	27.60

3/2/2017		3/2/2018	37.60	3/2/2019	26.53	3/1/2020	28.52
3/3/2017		3/3/2018	28.48	3/3/2019	28.36	3/2/2020	24.71
3/4/2017		3/4/2018	38.09	3/4/2019	26.97	3/3/2020	21.00
3/5/2017		3/5/2018	37.01	3/5/2019	28.80	3/4/2020	15.07
3/6/2017		3/6/2018	24.11	3/6/2019	24.07	3/5/2020	22.95
3/7/2017		3/7/2018	29.26	3/7/2019	34.06	3/6/2020	28.33
3/8/2017		3/8/2018	34.72	3/8/2019	31.34	3/7/2020	20.63
3/9/2017		3/9/2018	26.28	3/9/2019	27.42	3/8/2020	20.88
3/10/2017		3/10/2018	26.52	3/10/2019		3/9/2020	24.22
3/11/2017		3/11/2018	38.00	3/11/2019		3/10/2020	36.47
3/12/2017		3/12/2018	42.67	3/12/2019	24.26	3/11/2020	39.93
3/13/2017		3/13/2018	48.80	3/13/2019	27.38	3/12/2020	31.60
3/14/2017		3/14/2018	52.12	3/14/2019	29.16	3/13/2020	37.45
3/15/2017		3/15/2018	43.95	3/15/2019	21.71	3/14/2020	21.94
3/16/2017		3/16/2018	16.71	3/16/2019	25.81	3/15/2020	13.22
3/17/2017		3/17/2018	18.30	3/17/2019	36.08	3/16/2020	20.79
3/18/2017		3/18/2018	24.58	3/18/2019	34.03	3/17/2020	23.84
3/19/2017		3/19/2018	37.86	3/19/2019	26.94	3/18/2020	30.68
3/20/2017		3/20/2018	45.91	3/20/2019	26.62	3/19/2020	29.88
3/21/2017		3/21/2018	54.50	3/21/2019	20.38	3/20/2020	26.37
3/22/2017		3/22/2018	33.33	3/22/2019	21.71	3/21/2020	25.81
3/23/2017		3/23/2018	27.68	3/23/2019	28.08	3/22/2020	23.26
3/24/2017		3/24/2018	36.59	3/24/2019	50.68	3/23/2020	17.52
3/25/2017		3/25/2018	44.54	3/25/2019	57.14	3/24/2020	23.40
3/26/2017		3/26/2018	43.18	3/26/2019	26.55	3/25/2020	26.12
3/27/2017		3/27/2018	76.19	3/27/2019	13.72	3/26/2020	28.99
3/28/2017		3/28/2018	84.97	3/28/2019	20.18	3/27/2020	33.67
3/29/2017		3/29/2018	34.71	3/29/2019	36.86	3/28/2020	20.29
3/30/2017		3/30/2018	24.62	3/30/2019	54.90	3/29/2020	22.52
3/31/2017		3/31/2018	22.57	3/31/2019	37.70	3/30/2020	24.39
4/1/2017		4/1/2018	30.34	4/1/2019	13.05	3/31/2020	35.11
4/2/2017		4/2/2018	32.05	4/2/2019	17.75	4/1/2020	37.24

4/3/2017		4/3/2018	43.43	4/3/2019	31.50	4/2/2020	15.70
4/4/2017		4/4/2018	38.83	4/4/2019	40.87	4/3/2020	20.95
4/5/2017		4/5/2018	24.18	4/5/2019	54.31	4/4/2020	25.46
4/6/2017		4/6/2018	24.60	4/6/2019	31.05	4/5/2020	31.72
4/7/2017		4/7/2018	18.79	4/7/2019	14.77	4/6/2020	40.70
4/8/2017		4/8/2018	20.43	4/8/2019	13.75	4/7/2020	53.70
4/9/2017		4/9/2018	25.13	4/9/2019	15.45	4/8/2020	62.21
4/10/2017		4/10/2018	23.90	4/10/2019	19.07	4/9/2020	73.24
4/11/2017		4/11/2018	22.92	4/11/2019	20.00	4/10/2020	71.16
4/12/2017		4/12/2018	13.09	4/12/2019	25.09	4/11/2020	97.96
4/13/2017		4/13/2018	11.91	4/13/2019	23.45	4/12/2020	68.32
4/14/2017		4/14/2018		4/14/2019	19.63	4/13/2020	65.27
4/15/2017		4/15/2018		4/15/2019	18.81	4/14/2020	25.31
4/16/2017		4/16/2018		4/16/2019	18.20	4/15/2020	11.45
4/17/2017		4/17/2018		4/17/2019	15.27	4/16/2020	16.40
4/18/2017		4/18/2018		4/18/2019	11.11	4/17/2020	22.74
4/19/2017		4/19/2018		4/19/2019	13.47	4/18/2020	19.63
4/20/2017		4/20/2018		4/20/2019	18.26	4/19/2020	16.07
4/21/2017		4/21/2018		4/21/2019	33.84	4/20/2020	12.93
4/22/2017		4/22/2018		4/22/2019	27.87	4/21/2020	10.88
4/23/2017		4/23/2018		4/23/2019	34.33	4/22/2020	11.51
4/24/2017		4/24/2018		4/24/2019	31.03	4/23/2020	18.30
4/25/2017		4/25/2018		4/25/2019	29.91	4/24/2020	17.96
4/26/2017		4/26/2018		4/26/2019	27.02	4/25/2020	18.74
4/27/2017		4/27/2018		4/27/2019	28.72	4/26/2020	16.46
4/28/2017		4/28/2018		4/28/2019	25.04	4/27/2020	13.23
4/29/2017		4/29/2018		4/29/2019	30.90	4/28/2020	11.29
4/30/2017		4/30/2018		4/30/2019	27.52	4/29/2020	12.68
5/1/2017		5/1/2018		5/1/2019	22.40	4/30/2020	11.61
5/2/2017		5/2/2018		5/2/2019	16.75	5/1/2020	12.29
5/3/2017		5/3/2018		5/3/2019	19.26	5/2/2020	13.57
5/4/2017		5/4/2018		5/4/2019	16.44	5/3/2020	12.50

5/5/2017		5/5/2018		5/5/2019	14.62	5/4/2020	8.75
5/6/2017		5/6/2018		5/6/2019	21.76	5/5/2020	12.31
5/7/2017		5/7/2018		5/7/2019	31.27	5/6/2020	8.52
5/8/2017		5/8/2018		5/8/2019	47.58	5/7/2020	11.62
5/9/2017		5/9/2018		5/9/2019	51.01	5/8/2020	12.09
5/10/2017		5/10/2018		5/10/2019	49.58	5/9/2020	
5/11/2017		5/11/2018		5/11/2019	36.84	5/10/2020	
5/12/2017		5/12/2018		5/12/2019	22.78	5/11/2020	
5/13/2017		5/13/2018		5/13/2019	23.90	5/12/2020	
5/14/2017		5/14/2018		5/14/2019	23.46	5/13/2020	
5/15/2017		5/15/2018		5/15/2019	23.03	5/14/2020	
5/16/2017		5/16/2018		5/16/2019	28.80	5/15/2020	
5/17/2017		5/17/2018		5/17/2019	21.51	5/16/2020	
5/18/2017		5/18/2018		5/18/2019	17.77	5/17/2020	
5/19/2017		5/19/2018		5/19/2019	15.89	5/18/2020	
5/20/2017		5/20/2018		5/20/2019	24.39	5/19/2020	
5/21/2017		5/21/2018		5/21/2019	27.28	5/20/2020	
5/22/2017		5/22/2018		5/22/2019		5/21/2020	
5/23/2017		5/23/2018		5/23/2019		5/22/2020	
5/24/2017		5/24/2018		5/24/2019		5/23/2020	
5/25/2017		5/25/2018		5/25/2019		5/24/2020	
5/26/2017		5/26/2018		5/26/2019		5/25/2020	
5/27/2017		5/27/2018		5/27/2019		5/26/2020	
5/28/2017		5/28/2018		5/28/2019		5/27/2020	
5/29/2017		5/29/2018		5/29/2019		5/28/2020	
5/30/2017		5/30/2018		5/30/2019		5/29/2020	
5/31/2017		5/31/2018		5/31/2019		5/30/2020	
6/1/2017		6/1/2018		6/1/2019		5/31/2020	
6/2/2017		6/2/2018		6/2/2019		6/1/2020	
6/3/2017		6/3/2018		6/3/2019		6/2/2020	
6/4/2017		6/4/2018		6/4/2019		6/3/2020	
6/5/2017		6/5/2018		6/5/2019		6/4/2020	

6/6/2017		6/6/2018		6/6/2019		6/5/2020	
6/7/2017		6/7/2018		6/7/2019		6/6/2020	
6/8/2017		6/8/2018		6/8/2019		6/7/2020	
6/9/2017		6/9/2018		6/9/2019		6/8/2020	
6/10/2017		6/10/2018		6/10/2019		6/9/2020	
6/11/2017		6/11/2018		6/11/2019		6/10/2020	
6/12/2017		6/12/2018		6/12/2019		6/11/2020	
6/13/2017		6/13/2018		6/13/2019		6/12/2020	
6/14/2017		6/14/2018		6/14/2019		6/13/2020	
6/15/2017		6/15/2018		6/15/2019		6/14/2020	
6/16/2017		6/16/2018		6/16/2019	18.13	6/15/2020	
6/17/2017		6/17/2018		6/17/2019	17.49	6/16/2020	
6/18/2017		6/18/2018		6/18/2019	10.81	6/17/2020	
6/19/2017		6/19/2018		6/19/2019	11.05	6/18/2020	
6/20/2017		6/20/2018		6/20/2019	9.09	6/19/2020	
6/21/2017		6/21/2018		6/21/2019	9.75	6/20/2020	
6/22/2017		6/22/2018		6/22/2019	5.45	6/21/2020	
6/23/2017		6/23/2018		6/23/2019	5.59	6/22/2020	
6/24/2017		6/24/2018		6/24/2019	7.79	6/23/2020	
6/25/2017		6/25/2018		6/25/2019	7.11	6/24/2020	
6/26/2017		6/26/2018		6/26/2019	6.46	6/25/2020	
6/27/2017		6/27/2018		6/27/2019	8.34	6/26/2020	
6/28/2017		6/28/2018		6/28/2019	8.75	6/27/2020	
6/29/2017		6/29/2018		6/29/2019	11.68	6/28/2020	
6/30/2017		6/30/2018		6/30/2019	17.54	6/29/2020	
7/1/2017		7/1/2018		7/1/2019	15.31	6/30/2020	
7/2/2017		7/2/2018		7/2/2019	5.96	7/1/2020	
7/3/2017		7/3/2018		7/3/2019	3.13	7/2/2020	
7/4/2017		7/4/2018		7/4/2019	5.46	7/3/2020	
7/5/2017		7/5/2018		7/5/2019	6.40	7/4/2020	
7/6/2017		7/6/2018		7/6/2019	2.98	7/5/2020	
7/7/2017		7/7/2018		7/7/2019	3.52	7/6/2020	

7/8/2017		7/8/2018		7/8/2019	3.53	7/7/2020	
7/9/2017		7/9/2018		7/9/2019	4.81	7/8/2020	
7/10/2017		7/10/2018		7/10/2019	4.04	7/9/2020	
7/11/2017		7/11/2018		7/11/2019	4.12	7/10/2020	
7/12/2017		7/12/2018		7/12/2019	4.10	7/11/2020	
7/13/2017		7/13/2018		7/13/2019	3.46	7/12/2020	
7/14/2017		7/14/2018		7/14/2019	3.16	7/13/2020	
7/15/2017		7/15/2018		7/15/2019	6.42	7/14/2020	
7/16/2017		7/16/2018		7/16/2019	7.37	7/15/2020	
7/17/2017		7/17/2018		7/17/2019	7.04	7/16/2020	
7/18/2017		7/18/2018		7/18/2019	5.87	7/17/2020	
7/19/2017		7/19/2018		7/19/2019	7.39	7/18/2020	
7/20/2017		7/20/2018		7/20/2019	8.47	7/19/2020	
7/21/2017		7/21/2018		7/21/2019	5.53	7/20/2020	
7/22/2017		7/22/2018		7/22/2019	6.65	7/21/2020	
7/23/2017		7/23/2018		7/23/2019	5.41	7/22/2020	
7/24/2017		7/24/2018		7/24/2019	4.38	7/23/2020	
7/25/2017		7/25/2018		7/25/2019	5.20	7/24/2020	
7/26/2017		7/26/2018		7/26/2019	3.99	7/25/2020	
7/27/2017		7/27/2018		7/27/2019	3.87	7/26/2020	
7/28/2017		7/28/2018	5.90	7/28/2019	4.09	7/27/2020	
7/29/2017		7/29/2018	3.96	7/29/2019	4.94	7/28/2020	
7/30/2017		7/30/2018	6.80	7/30/2019	4.57	7/29/2020	
7/31/2017		7/31/2018	8.40	7/31/2019	5.32	7/30/2020	
8/1/2017		8/1/2018	4.86	8/1/2019	5.65	7/31/2020	
8/2/2017		8/2/2018	4.83	8/2/2019	6.59	8/1/2020	
8/3/2017		8/3/2018	3.81	8/3/2019	4.74	8/2/2020	
8/4/2017		8/4/2018	4.63	8/4/2019	6.55	8/3/2020	
8/5/2017		8/5/2018	5.77	8/5/2019	5.09	8/4/2020	
8/6/2017		8/6/2018	7.09	8/6/2019	3.94	8/5/2020	
8/7/2017		8/7/2018	4.30	8/7/2019	3.41	8/6/2020	
8/8/2017		8/8/2018	4.92	8/8/2019	3.69	8/7/2020	

8/9/2017		8/9/2018	8.10	8/9/2019	3.57	8/8/2020	
8/10/2017		8/10/2018	7.34	8/10/2019	4.59	8/9/2020	
8/11/2017		8/11/2018	6.01	8/11/2019	3.93	8/10/2020	
8/12/2017		8/12/2018	7.78	8/12/2019	4.12	8/11/2020	
8/13/2017		8/13/2018	5.82	8/13/2019	4.10	8/12/2020	
8/14/2017		8/14/2018	8.88	8/14/2019	4.42	8/13/2020	
8/15/2017		8/15/2018	5.86	8/15/2019	5.20	8/14/2020	
8/16/2017	4.22	8/16/2018	3.66	8/16/2019	5.97	8/15/2020	
8/17/2017	6.97	8/17/2018	5.04	8/17/2019	7.06	8/16/2020	
8/18/2017	9.07	8/18/2018	4.85	8/18/2019	5.79	8/17/2020	
8/19/2017	5.69	8/19/2018	4.04	8/19/2019	4.07	8/18/2020	
8/20/2017	6.26	8/20/2018	7.45	8/20/2019	6.34	8/19/2020	
8/21/2017	7.81	8/21/2018	5.69	8/21/2019	7.08	8/20/2020	
8/22/2017	7.25	8/22/2018	4.16	8/22/2019	4.82	8/21/2020	
8/23/2017	7.56	8/23/2018	5.61	8/23/2019	6.95	8/22/2020	
8/24/2017	6.11	8/24/2018	5.00	8/24/2019	3.47	8/23/2020	
8/25/2017	6.53	8/25/2018	5.78	8/25/2019	5.04	8/24/2020	
8/26/2017	7.09	8/26/2018	8.94	8/26/2019	4.48	8/25/2020	
8/27/2017	6.97	8/27/2018	4.23	8/27/2019	5.42	8/26/2020	
8/28/2017	4.16	8/28/2018	4.46	8/28/2019	7.46	8/27/2020	
8/29/2017	5.98	8/29/2018	3.70	8/29/2019	7.62	8/28/2020	
8/30/2017	7.34	8/30/2018	5.50	8/30/2019	8.70	8/29/2020	
8/31/2017	6.31	8/31/2018	5.19	8/31/2019	7.91	8/30/2020	
9/1/2017	5.91	9/1/2018	7.00	9/1/2019	6.10	8/31/2020	
9/2/2017	3.91	9/2/2018	6.26	9/2/2019	7.73	9/1/2020	
9/3/2017	3.65	9/3/2018	4.42	9/3/2019		9/2/2020	
9/4/2017	5.83	9/4/2018	7.69	9/4/2019		9/3/2020	
9/5/2017	11.19	9/5/2018	11.64	9/5/2019		9/4/2020	
9/6/2017	16.01	9/6/2018	10.66	9/6/2019		9/5/2020	
9/7/2017	14.58	9/7/2018	4.51	9/7/2019		9/6/2020	
9/8/2017	12.18	9/8/2018	7.74	9/8/2019		9/7/2020	
9/9/2017	12.77	9/9/2018	7.62	9/9/2019		9/8/2020	

9/10/2017	13.44	9/10/2018	6.06	9/10/2019		9/9/2020	
9/11/2017	8.68	9/11/2018	6.60	9/11/2019		9/10/2020	
9/12/2017	9.58	9/12/2018	5.63	9/12/2019		9/11/2020	
9/13/2017	10.01	9/13/2018	5.56	9/13/2019		9/12/2020	
9/14/2017	14.86	9/14/2018	7.77	9/14/2019		9/13/2020	
9/15/2017	18.05	9/15/2018	8.68	9/15/2019		9/14/2020	
9/16/2017	14.74	9/16/2018	8.28	9/16/2019		9/15/2020	
9/17/2017	14.36	9/17/2018	9.75	9/17/2019		9/16/2020	
9/18/2017	6.28	9/18/2018	10.87	9/18/2019		9/17/2020	
9/19/2017	8.38	9/19/2018	12.65	9/19/2019		9/18/2020	
9/20/2017	6.61	9/20/2018	11.33	9/20/2019		9/19/2020	
9/21/2017	6.37	9/21/2018	8.39	9/21/2019		9/20/2020	
9/22/2017	10.75	9/22/2018	6.79	9/22/2019		9/21/2020	
9/23/2017	10.80	9/23/2018	9.15	9/23/2019		9/22/2020	
9/24/2017	12.29	9/24/2018	10.07	9/24/2019		9/23/2020	
9/25/2017	17.72	9/25/2018	13.79	9/25/2019		9/24/2020	
9/26/2017	20.23	9/26/2018	15.95	9/26/2019		9/25/2020	
9/27/2017	18.01	9/27/2018	14.03	9/27/2019		9/26/2020	
9/28/2017	20.83	9/28/2018	14.35	9/28/2019		9/27/2020	
9/29/2017	19.24	9/29/2018	16.65	9/29/2019		9/28/2020	
9/30/2017	6.18	9/30/2018	19.07	9/30/2019		9/29/2020	
10/1/2017	8.03	10/1/2018	20.45	10/1/2019		9/30/2020	17.85
10/2/2017	8.73	10/2/2018	19.00	10/2/2019		10/1/2020	19.52
10/3/2017	10.50	10/3/2018	17.12	10/3/2019		10/2/2020	21.31
10/4/2017	12.09	10/4/2018	18.45	10/4/2019		10/3/2020	15.39
10/5/2017	10.58	10/5/2018	18.23	10/5/2019		10/4/2020	13.36
10/6/2017	9.18	10/6/2018	14.44	10/6/2019		10/5/2020	16.34
10/7/2017	9.45	10/7/2018	14.12	10/7/2019		10/6/2020	14.26
10/8/2017	11.69	10/8/2018	16.09	10/8/2019		10/7/2020	14.09
10/9/2017	16.91	10/9/2018	19.82	10/9/2019		10/8/2020	13.06
10/10/2017	12.43	10/10/2018	26.26	10/10/2019		10/9/2020	12.97
10/11/2017	7.58	10/11/2018	24.47	10/11/2019		10/10/2020	12.63

10/12/2017	8.49	10/12/2018	16.14	10/12/2019		10/11/2020	12.79
10/13/2017	9.87	10/13/2018	10.59	10/13/2019		10/12/2020	13.82
10/14/2017	16.61	10/14/2018	14.78	10/14/2019		10/13/2020	15.40
10/15/2017	34.79	10/15/2018	25.77	10/15/2019		10/14/2020	14.89
10/16/2017	38.18	10/16/2018	31.26	10/16/2019		10/15/2020	15.10
10/17/2017	29.48	10/17/2018	39.75	10/17/2019		10/16/2020	15.72
10/18/2017	25.73	10/18/2018	32.74	10/18/2019		10/17/2020	16.06
10/19/2017	18.19	10/19/2018	27.78	10/19/2019		10/18/2020	16.63
10/20/2017	19.21	10/20/2018	29.51	10/20/2019		10/19/2020	20.57
10/21/2017	14.67	10/21/2018	28.30	10/21/2019		10/20/2020	19.45
10/22/2017	17.26	10/22/2018	26.35	10/22/2019		10/21/2020	28.28
10/23/2017	32.18	10/23/2018	24.67	10/23/2019		10/22/2020	26.92
10/24/2017	33.30	10/24/2018	26.23	10/24/2019	17.70	10/23/2020	23.31
10/25/2017	32.75	10/25/2018	25.59	10/25/2019	27.01	10/24/2020	22.22
10/26/2017	34.89	10/26/2018	24.67	10/26/2019	24.89	10/25/2020	21.39
10/27/2017	34.94	10/27/2018	23.65	10/27/2019	21.55	10/26/2020	16.68
10/28/2017	36.82	10/28/2018	23.67	10/28/2019	26.04	10/27/2020	16.61
10/29/2017	31.85	10/29/2018	21.92	10/29/2019	25.72	10/28/2020	14.30
10/30/2017	26.08	10/30/2018	22.53	10/30/2019	23.27	10/29/2020	15.29
10/31/2017	28.17	10/31/2018	24.19	10/31/2019	20.88	10/30/2020	12.88
11/1/2017	21.60	11/1/2018	25.00	11/1/2019	27.20	10/31/2020	10.08
11/2/2017	21.88	11/2/2018	23.72	11/2/2019	31.04	11/1/2020	11.38
11/3/2017	25.58	11/3/2018	23.00	11/3/2019	26.19	11/2/2020	14.96
11/4/2017	25.36	11/4/2018	30.25	11/4/2019	18.39	11/3/2020	23.67
11/5/2017	21.66	11/5/2018	27.17	11/5/2019	20.11	11/4/2020	24.67
11/6/2017	22.43	11/6/2018	27.30	11/6/2019	24.96	11/5/2020	45.99
11/7/2017	25.61	11/7/2018	32.85	11/7/2019	30.57	11/6/2020	45.40
11/8/2017	24.77	11/8/2018	37.66	11/8/2019	30.65	11/7/2020	44.05
11/9/2017	31.78	11/9/2018	34.16	11/9/2019	20.20	11/8/2020	34.57
11/10/2017	24.35	11/10/2018	31.35	11/10/2019	21.74	11/9/2020	25.55
11/11/2017	30.40	11/11/2018	31.79	11/11/2019	22.49	11/10/2020	22.73
11/12/2017	32.69	11/12/2018	39.53	11/12/2019	28.91	11/11/2020	20.46

11/13/2017	27.38	11/13/2018	33.75	11/13/2019	32.04	11/12/2020	18.45
11/14/2017	28.28	11/14/2018	33.43	11/14/2019	29.68	11/13/2020	21.43
11/15/2017	29.46	11/15/2018	38.36	11/15/2019	24.00	11/14/2020	20.94
11/16/2017	28.96	11/16/2018	49.72	11/16/2019		11/15/2020	19.38
11/17/2017	24.73	11/17/2018	47.58	11/17/2019		11/16/2020	40.60
11/18/2017	26.24	11/18/2018	50.62	11/18/2019		11/17/2020	16.43
11/19/2017	29.41	11/19/2018	55.90	11/19/2019		11/18/2020	18.14
11/20/2017	30.95	11/20/2018	56.33	11/20/2019		11/19/2020	20.01
11/21/2017	36.62	11/21/2018	66.40	11/21/2019		11/20/2020	23.08
11/22/2017	31.98	11/22/2018	76.31	11/22/2019		11/21/2020	27.45
11/23/2017	32.56	11/23/2018	58.04	11/23/2019		11/22/2020	34.03
11/24/2017	35.10	11/24/2018	43.59	11/24/2019		11/23/2020	36.65
11/25/2017	40.88	11/25/2018	45.83	11/25/2019		11/24/2020	34.63
11/26/2017	38.84	11/26/2018	39.30	11/26/2019		11/25/2020	39.76
11/27/2017	39.41	11/27/2018	38.24	11/27/2019		11/26/2020	34.85
11/28/2017	42.72	11/28/2018	43.86	11/28/2019		11/27/2020	40.73
11/29/2017	65.93	11/29/2018	42.26	11/29/2019		11/28/2020	29.67
11/30/2017	57.58	11/30/2018	35.28	11/30/2019		11/29/2020	29.97
12/1/2017	51.12	12/1/2018	32.27	12/1/2019		11/30/2020	29.96
12/2/2017	44.32	12/2/2018	41.92	12/2/2019		12/1/2020	25.56
12/3/2017	39.34	12/3/2018	44.97	12/3/2019		12/2/2020	23.74
12/4/2017	37.58	12/4/2018	43.23	12/4/2019		12/3/2020	25.25
12/5/2017	49.27	12/5/2018	46.01	12/5/2019		12/4/2020	28.99
12/6/2017	42.83	12/6/2018	40.66	12/6/2019		12/5/2020	38.76
12/7/2017	33.86	12/7/2018	41.30	12/7/2019		12/6/2020	38.23
12/8/2017	42.69	12/8/2018	45.70	12/8/2019		12/7/2020	45.02
12/9/2017	37.82	12/9/2018	46.24	12/9/2019		12/8/2020	52.76
12/10/2017	33.47	12/10/2018	37.06	12/10/2019		12/9/2020	60.51
12/11/2017	36.74	12/11/2018	33.07	12/11/2019		12/10/2020	50.58
12/12/2017	38.87	12/12/2018	35.86	12/12/2019		12/11/2020	39.14
12/13/2017	33.52	12/13/2018	30.85	12/13/2019		12/12/2020	40.87
12/14/2017	37.50	12/14/2018	32.98	12/14/2019		12/13/2020	35.98

12/15/2017	37.22	12/15/2018	33.38	12/15/2019		12/14/2020	32.59
12/16/2017	40.00	12/16/2018	35.81	12/16/2019		12/15/2020	32.29
12/17/2017	45.66	12/17/2018	43.13	12/17/2019		12/16/2020	36.24
12/18/2017	45.19	12/18/2018	55.51	12/18/2019	46.21	12/17/2020	30.53
12/19/2017	40.90	12/19/2018	74.41	12/19/2019	47.40	12/18/2020	42.74
12/20/2017	43.01	12/20/2018	72.56	12/20/2019	50.41	12/19/2020	50.46
12/21/2017	40.66	12/21/2018	66.79	12/21/2019	49.91	12/20/2020	52.48
12/22/2017	36.32	12/22/2018	65.86	12/22/2019	50.07	12/21/2020	48.84
12/23/2017	35.70	12/23/2018	54.93	12/23/2019	56.93	12/22/2020	47.80
12/24/2017	39.00	12/24/2018	47.96	12/24/2019	49.15	12/23/2020	49.66
12/25/2017	42.93	12/25/2018	45.85	12/25/2019	51.10	12/24/2020	46.55
12/26/2017	43.86	12/26/2018	46.79	12/26/2019	57.37	12/25/2020	46.22
12/27/2017	41.46	12/27/2018	49.88	12/27/2019	55.69	12/26/2020	48.81
12/28/2017	45.93	12/28/2018	57.04	12/28/2019	54.49	12/27/2020	48.96
12/29/2017	50.39	12/29/2018	53.73	12/29/2019	58.44	12/28/2020	48.33
12/30/2017	42.65	12/30/2018	50.56	12/30/2019	50.29	12/29/2020	48.78
12/31/2017	39.86	12/31/2018	49.63	12/31/2019	57.07	12/30/2020	52.23
						12/31/2020	52.37

PM2.5

Date	Value	Date	Value	Date	Value	Date	Value
1/1/2017		1/1/2018	46.04	1/1/2019	57.57	1/1/2020	
1/2/2017		1/2/2018	40.71	1/2/2019	62.32	1/2/2020	
1/3/2017		1/3/2018	41.76	1/3/2019	50.98	1/3/2020	
1/4/2017		1/4/2018	41.56	1/4/2019	50.38	1/4/2020	
1/5/2017		1/5/2018	43.08	1/5/2019	58.96	1/5/2020	
1/6/2017		1/6/2018	46.90	1/6/2019	55.84	1/6/2020	41.94
1/7/2017		1/7/2018	45.48	1/7/2019	49.26	1/7/2020	41.98
1/8/2017		1/8/2018	51.11	1/8/2019	45.57	1/8/2020	50.17
1/9/2017		1/9/2018	61.71	1/9/2019	42.38	1/9/2020	39.96
1/10/2017		1/10/2018	65.55	1/10/2019	52.89	1/10/2020	39.49

1/11/2017		1/11/2018	54.35	1/11/2019	69.80	1/11/2020	43.35
1/12/2017		1/12/2018	52.49	1/12/2019	77.54	1/12/2020	48.22
1/13/2017		1/13/2018	49.45	1/13/2019	68.66	1/13/2020	46.54
1/14/2017		1/14/2018	60.10	1/14/2019	61.79	1/14/2020	49.91
1/15/2017		1/15/2018	59.23	1/15/2019	61.10	1/15/2020	46.21
1/16/2017		1/16/2018	50.98	1/16/2019	60.60	1/16/2020	47.24
1/17/2017		1/17/2018	51.65	1/17/2019	63.20	1/17/2020	25.59
1/18/2017		1/18/2018	46.65	1/18/2019	58.61	1/18/2020	26.82
1/19/2017		1/19/2018	51.38	1/19/2019	53.19	1/19/2020	30.99
1/20/2017		1/20/2018	52.04	1/20/2019	63.49	1/20/2020	33.40
1/21/2017		1/21/2018	51.84	1/21/2019	58.04	1/21/2020	46.79
1/22/2017		1/22/2018	58.02	1/22/2019	54.94	1/22/2020	37.87
1/23/2017		1/23/2018	55.42	1/23/2019	30.04	1/23/2020	35.47
1/24/2017		1/24/2018	39.82	1/24/2019	27.36	1/24/2020	50.27
1/25/2017		1/25/2018	37.99	1/25/2019	30.89	1/25/2020	56.92
1/26/2017		1/26/2018	41.40	1/26/2019	14.00	1/26/2020	64.80
1/27/2017		1/27/2018	50.90	1/27/2019	26.96	1/27/2020	57.64
1/28/2017		1/28/2018	65.99	1/28/2019	24.22	1/28/2020	51.23
1/29/2017		1/29/2018	79.59	1/29/2019	29.92	1/29/2020	43.18
1/30/2017		1/30/2018	68.00	1/30/2019	31.52	1/30/2020	30.76
1/31/2017		1/31/2018	81.80	1/31/2019	43.34	1/31/2020	37.55
2/1/2017		2/1/2018	78.99	2/1/2019	48.68	2/1/2020	44.10
2/2/2017		2/2/2018	81.33	2/2/2019	43.82	2/2/2020	40.76
2/3/2017		2/3/2018	78.41	2/3/2019	46.15	2/3/2020	43.72
2/4/2017		2/4/2018	74.88	2/4/2019	46.36	2/4/2020	46.19
2/5/2017		2/5/2018	73.74	2/5/2019	51.00	2/5/2020	45.58
2/6/2017		2/6/2018	80.22	2/6/2019	60.62	2/6/2020	55.11
2/7/2017		2/7/2018	68.56	2/7/2019	40.95	2/7/2020	58.74
2/8/2017		2/8/2018	49.68	2/8/2019	15.97	2/8/2020	54.14
2/9/2017		2/9/2018	47.22	2/9/2019	10.64	2/9/2020	38.02
2/10/2017		2/10/2018	50.71	2/10/2019	23.36	2/10/2020	45.35
2/11/2017		2/11/2018	66.56	2/11/2019	26.05	2/11/2020	45.35

2/12/2017		2/12/2018	72.39	2/12/2019	36.62	2/12/2020	50.24
2/13/2017		2/13/2018	47.28	2/13/2019	36.22	2/13/2020	54.57
2/14/2017		2/14/2018	56.43	2/14/2019	47.09	2/14/2020	57.00
2/15/2017		2/15/2018	42.54	2/15/2019	21.47	2/15/2020	80.96
2/16/2017		2/16/2018	55.73	2/16/2019	13.91	2/16/2020	84.51
2/17/2017		2/17/2018	61.07	2/17/2019	19.17	2/17/2020	74.23
2/18/2017		2/18/2018	69.18	2/18/2019	34.56	2/18/2020	75.01
2/19/2017		2/19/2018	70.06	2/19/2019	39.56	2/19/2020	73.83
2/20/2017		2/20/2018	66.14	2/20/2019	31.60	2/20/2020	75.83
2/21/2017		2/21/2018	68.58	2/21/2019	37.17	2/21/2020	74.50
2/22/2017		2/22/2018	50.77	2/22/2019	41.06	2/22/2020	50.50
2/23/2017		2/23/2018	51.19	2/23/2019	42.00	2/23/2020	34.79
2/24/2017		2/24/2018	65.86	2/24/2019	46.16	2/24/2020	32.79
2/25/2017		2/25/2018	66.93	2/25/2019	21.37	2/25/2020	31.78
2/26/2017		2/26/2018	36.69	2/26/2019	20.39	2/26/2020	17.87
2/27/2017		2/27/2018	51.44	2/27/2019	20.57	2/27/2020	17.26
2/28/2017		2/28/2018	60.38	2/28/2019	16.27	2/28/2020	24.02
3/1/2017		3/1/2018	60.07	3/1/2019	20.08	2/29/2020	29.99
3/2/2017		3/2/2018	41.84	3/2/2019	29.02	3/1/2020	31.22
3/3/2017		3/3/2018	33.13	3/3/2019	30.48	3/2/2020	27.90
3/4/2017		3/4/2018	45.30	3/4/2019	29.84	3/3/2020	24.02
3/5/2017		3/5/2018	46.29	3/5/2019	31.45	3/4/2020	17.72
3/6/2017		3/6/2018	31.11	3/6/2019	27.03	3/5/2020	26.90
3/7/2017		3/7/2018	36.30	3/7/2019	38.02	3/6/2020	32.13
3/8/2017		3/8/2018	41.51	3/8/2019	34.13	3/7/2020	23.03
3/9/2017		3/9/2018	29.61	3/9/2019	29.40	3/8/2020	23.75
3/10/2017		3/10/2018	29.40	3/10/2019		3/9/2020	27.66
3/11/2017		3/11/2018	41.55	3/11/2019		3/10/2020	41.14
3/12/2017		3/12/2018	47.31	3/12/2019	32.04	3/11/2020	44.07
3/13/2017		3/13/2018	55.01	3/13/2019	35.00	3/12/2020	36.09
3/14/2017		3/14/2018	61.24	3/14/2019	35.66	3/13/2020	41.83
3/15/2017		3/15/2018	50.86	3/15/2019	27.82	3/14/2020	24.22

3/16/2017		3/16/2018	20.43	3/16/2019	31.65	3/15/2020	16.53
3/17/2017		3/17/2018	22.64	3/17/2019	44.00	3/16/2020	23.88
3/18/2017		3/18/2018	30.64	3/18/2019	41.24	3/17/2020	26.96
3/19/2017		3/19/2018	45.71	3/19/2019	31.04	3/18/2020	33.98
3/20/2017		3/20/2018	55.96	3/20/2019	29.60	3/19/2020	32.36
3/21/2017		3/21/2018	63.72	3/21/2019	23.13	3/20/2020	28.81
3/22/2017		3/22/2018	39.71	3/22/2019	25.93	3/21/2020	28.43
3/23/2017		3/23/2018	34.56	3/23/2019	33.35	3/22/2020	25.69
3/24/2017		3/24/2018	46.41	3/24/2019	58.24	3/23/2020	19.29
3/25/2017		3/25/2018	56.34	3/25/2019	63.33	3/24/2020	26.02
3/26/2017		3/26/2018	52.04	3/26/2019	29.50	3/25/2020	28.76
3/27/2017		3/27/2018	86.78	3/27/2019	16.42	3/26/2020	32.09
3/28/2017		3/28/2018	94.61	3/28/2019	23.65	3/27/2020	37.76
3/29/2017		3/29/2018	39.58	3/29/2019	42.51	3/28/2020	23.06
3/30/2017		3/30/2018	28.40	3/30/2019	59.10	3/29/2020	25.95
3/31/2017		3/31/2018	26.73	3/31/2019	42.32	3/30/2020	27.47
4/1/2017		4/1/2018	37.27	4/1/2019	15.60	3/31/2020	39.10
4/2/2017		4/2/2018	41.53	4/2/2019	21.12	4/1/2020	41.21
4/3/2017		4/3/2018	52.62	4/3/2019	36.24	4/2/2020	19.04
4/4/2017		4/4/2018	43.57	4/4/2019	45.81	4/3/2020	25.47
4/5/2017		4/5/2018	28.35	4/5/2019	60.03	4/4/2020	29.06
4/6/2017		4/6/2018	29.68	4/6/2019	33.52	4/5/2020	35.09
4/7/2017		4/7/2018	22.40	4/7/2019	16.96	4/6/2020	44.56
4/8/2017		4/8/2018	25.27	4/8/2019	15.82	4/7/2020	58.13
4/9/2017		4/9/2018	30.08	4/9/2019	18.54	4/8/2020	67.48
4/10/2017		4/10/2018	28.54	4/10/2019	22.31	4/9/2020	79.68
4/11/2017		4/11/2018	26.09	4/11/2019	23.54	4/10/2020	76.77
4/12/2017		4/12/2018	15.50	4/12/2019	29.31	4/11/2020	102.31
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4/14/2017		4/14/2018		4/14/2019	23.44	4/13/2020	72.29
4/15/2017		4/15/2018		4/15/2019	22.25	4/14/2020	28.32
4/16/2017		4/16/2018		4/16/2019	22.08	4/15/2020	13.59

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4/19/2017		4/19/2018		4/19/2019	16.49	4/18/2020	23.07
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4/21/2017		4/21/2018		4/21/2019	37.09	4/20/2020	17.53
4/22/2017		4/22/2018		4/22/2019	30.97	4/21/2020	13.08
4/23/2017		4/23/2018		4/23/2019	38.11	4/22/2020	13.32
4/24/2017		4/24/2018		4/24/2019	34.57	4/23/2020	20.41
4/25/2017		4/25/2018		4/25/2019	33.57	4/24/2020	20.03
4/26/2017		4/26/2018		4/26/2019	30.91	4/25/2020	20.99
4/27/2017		4/27/2018		4/27/2019	32.94	4/26/2020	18.70
4/28/2017		4/28/2018		4/28/2019	29.52	4/27/2020	15.21
4/29/2017		4/29/2018		4/29/2019	36.35	4/28/2020	14.32
4/30/2017		4/30/2018		4/30/2019	32.33	4/29/2020	15.03
5/1/2017		5/1/2018		5/1/2019	27.83	4/30/2020	13.41
5/2/2017		5/2/2018		5/2/2019	21.68	5/1/2020	14.73
5/3/2017		5/3/2018		5/3/2019	23.75	5/2/2020	16.22
5/4/2017		5/4/2018		5/4/2019	20.06	5/3/2020	14.70
5/5/2017		5/5/2018		5/5/2019	17.80	5/4/2020	11.12
5/6/2017		5/6/2018		5/6/2019	26.50	5/5/2020	16.06
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5/8/2017		5/8/2018		5/8/2019	52.94	5/7/2020	14.28
5/9/2017		5/9/2018		5/9/2019	56.70	5/8/2020	14.31
5/10/2017		5/10/2018		5/10/2019	55.37	5/9/2020	
5/11/2017		5/11/2018		5/11/2019	41.00	5/10/2020	
5/12/2017		5/12/2018		5/12/2019	29.18	5/11/2020	
5/13/2017		5/13/2018		5/13/2019	27.70	5/12/2020	
5/14/2017		5/14/2018		5/14/2019	27.03	5/13/2020	
5/15/2017		5/15/2018		5/15/2019	26.69	5/14/2020	
5/16/2017		5/16/2018		5/16/2019	32.76	5/15/2020	
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5/31/2017		5/31/2018		5/31/2019		5/30/2020	
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6/2/2017		6/2/2018		6/2/2019		6/1/2020	
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6/4/2017		6/4/2018		6/4/2019		6/3/2020	
6/5/2017		6/5/2018		6/5/2019		6/4/2020	
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6/7/2017		6/7/2018		6/7/2019		6/6/2020	
6/8/2017		6/8/2018		6/8/2019		6/7/2020	
6/9/2017		6/9/2018		6/9/2019		6/8/2020	
6/10/2017		6/10/2018		6/10/2019		6/9/2020	
6/11/2017		6/11/2018		6/11/2019		6/10/2020	
6/12/2017		6/12/2018		6/12/2019		6/11/2020	
6/13/2017		6/13/2018		6/13/2019		6/12/2020	
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6/15/2017		6/15/2018		6/15/2019		6/14/2020	
6/16/2017		6/16/2018		6/16/2019	20.79	6/15/2020	
6/17/2017		6/17/2018		6/17/2019	21.13	6/16/2020	
6/18/2017		6/18/2018		6/18/2019	13.87	6/17/2020	
6/19/2017		6/19/2018		6/19/2019	15.11	6/18/2020	

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6/23/2017		6/23/2018		6/23/2019	6.95	6/22/2020	
6/24/2017		6/24/2018		6/24/2019	10.16	6/23/2020	
6/25/2017		6/25/2018		6/25/2019	8.88	6/24/2020	
6/26/2017		6/26/2018		6/26/2019	8.27	6/25/2020	
6/27/2017		6/27/2018		6/27/2019	9.95	6/26/2020	
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6/29/2017		6/29/2018		6/29/2019	13.86	6/28/2020	
6/30/2017		6/30/2018		6/30/2019	20.20	6/29/2020	
7/1/2017		7/1/2018		7/1/2019	18.87	6/30/2020	
7/2/2017		7/2/2018		7/2/2019	7.45	7/1/2020	
7/3/2017		7/3/2018		7/3/2019	4.28	7/2/2020	
7/4/2017		7/4/2018		7/4/2019	7.06	7/3/2020	
7/5/2017		7/5/2018		7/5/2019	7.68	7/4/2020	
7/6/2017		7/6/2018		7/6/2019	3.89	7/5/2020	
7/7/2017		7/7/2018		7/7/2019	4.87	7/6/2020	
7/8/2017		7/8/2018		7/8/2019	4.88	7/7/2020	
7/9/2017		7/9/2018		7/9/2019	5.90	7/8/2020	
7/10/2017		7/10/2018		7/10/2019	5.09	7/9/2020	
7/11/2017		7/11/2018		7/11/2019	5.31	7/10/2020	
7/12/2017		7/12/2018		7/12/2019	5.24	7/11/2020	
7/13/2017		7/13/2018		7/13/2019	4.70	7/12/2020	
7/14/2017		7/14/2018		7/14/2019	4.49	7/13/2020	
7/15/2017		7/15/2018		7/15/2019	10.82	7/14/2020	
7/16/2017		7/16/2018		7/16/2019	11.50	7/15/2020	
7/17/2017		7/17/2018		7/17/2019	10.89	7/16/2020	
7/18/2017		7/18/2018		7/18/2019	8.60	7/17/2020	
7/19/2017		7/19/2018		7/19/2019	10.06	7/18/2020	
7/20/2017		7/20/2018		7/20/2019	11.49	7/19/2020	
7/21/2017		7/21/2018		7/21/2019	7.97	7/20/2020	

7/22/2017		7/22/2018		7/22/2019	8.35	7/21/2020	
7/23/2017		7/23/2018		7/23/2019	6.59	7/22/2020	
7/24/2017		7/24/2018		7/24/2019	5.30	7/23/2020	
7/25/2017		7/25/2018		7/25/2019	6.81	7/24/2020	
7/26/2017		7/26/2018		7/26/2019	4.84	7/25/2020	
7/27/2017		7/27/2018		7/27/2019	5.32	7/26/2020	
7/28/2017		7/28/2018	7.85	7/28/2019	5.52	7/27/2020	
7/29/2017		7/29/2018	6.28	7/29/2019	6.38	7/28/2020	
7/30/2017		7/30/2018	9.66	7/30/2019	5.66	7/29/2020	
7/31/2017		7/31/2018	11.02	7/31/2019	6.44	7/30/2020	
8/1/2017		8/1/2018	6.07	8/1/2019	6.65	7/31/2020	
8/2/2017		8/2/2018	6.31	8/2/2019	8.06	8/1/2020	
8/3/2017		8/3/2018	5.42	8/3/2019	5.79	8/2/2020	
8/4/2017		8/4/2018	6.27	8/4/2019	7.84	8/3/2020	
8/5/2017		8/5/2018	7.41	8/5/2019	5.97	8/4/2020	
8/6/2017		8/6/2018	9.15	8/6/2019	5.16	8/5/2020	
8/7/2017		8/7/2018	6.05	8/7/2019	4.54	8/6/2020	
8/8/2017		8/8/2018	6.43	8/8/2019	4.57	8/7/2020	
8/9/2017		8/9/2018	10.77	8/9/2019	4.76	8/8/2020	
8/10/2017		8/10/2018	9.38	8/10/2019	5.85	8/9/2020	
8/11/2017		8/11/2018	7.24	8/11/2019	4.78	8/10/2020	
8/12/2017		8/12/2018	9.68	8/12/2019	5.38	8/11/2020	
8/13/2017		8/13/2018	6.65	8/13/2019	5.19	8/12/2020	
8/14/2017		8/14/2018	10.43	8/14/2019	5.48	8/13/2020	
8/15/2017		8/15/2018	6.89	8/15/2019	6.45	8/14/2020	
8/16/2017	5.80	8/16/2018	4.58	8/16/2019	7.50	8/15/2020	
8/17/2017	10.06	8/17/2018	6.44	8/17/2019	8.35	8/16/2020	
8/18/2017	12.96	8/18/2018	6.25	8/18/2019	6.98	8/17/2020	
8/19/2017	8.02	8/19/2018	5.40	8/19/2019	4.73	8/18/2020	
8/20/2017	8.32	8/20/2018	9.31	8/20/2019	7.33	8/19/2020	
8/21/2017	10.27	8/21/2018	6.77	8/21/2019	8.40	8/20/2020	
8/22/2017	8.67	8/22/2018	5.08	8/22/2019	5.98	8/21/2020	

8/23/2017	10.16	8/23/2018	6.79	8/23/2019	8.52	8/22/2020	
8/24/2017	8.59	8/24/2018	6.06	8/24/2019	4.06	8/23/2020	
8/25/2017	9.91	8/25/2018	7.27	8/25/2019	6.33	8/24/2020	
8/26/2017	9.46	8/26/2018	10.74	8/26/2019	5.84	8/25/2020	
8/27/2017	9.62	8/27/2018	5.17	8/27/2019	6.72	8/26/2020	
8/28/2017	6.57	8/28/2018	5.55	8/28/2019	8.78	8/27/2020	
8/29/2017	7.94	8/29/2018	4.92	8/29/2019	8.75	8/28/2020	
8/30/2017	9.81	8/30/2018	6.89	8/30/2019	10.29	8/29/2020	
8/31/2017	8.47	8/31/2018	6.10	8/31/2019	8.87	8/30/2020	
9/1/2017	8.15	9/1/2018	8.68	9/1/2019	6.87	8/31/2020	
9/2/2017	4.90	9/2/2018	7.23	9/2/2019	9.34	9/1/2020	
9/3/2017	4.93	9/3/2018	5.28	9/3/2019		9/2/2020	
9/4/2017	7.98	9/4/2018	8.76	9/4/2019		9/3/2020	
9/5/2017	14.73	9/5/2018	13.11	9/5/2019		9/4/2020	
9/6/2017	20.61	9/6/2018	12.12	9/6/2019		9/5/2020	
9/7/2017	18.89	9/7/2018	5.68	9/7/2019		9/6/2020	
9/8/2017	15.67	9/8/2018	9.71	9/8/2019		9/7/2020	
9/9/2017	17.06	9/9/2018	9.18	9/9/2019		9/8/2020	
9/10/2017	18.06	9/10/2018	6.75	9/10/2019		9/9/2020	
9/11/2017	11.15	9/11/2018	7.50	9/11/2019		9/10/2020	
9/12/2017	12.02	9/12/2018	6.53	9/12/2019		9/11/2020	
9/13/2017	12.61	9/13/2018	6.37	9/13/2019		9/12/2020	
9/14/2017	19.00	9/14/2018	8.95	9/14/2019		9/13/2020	
9/15/2017	23.55	9/15/2018	10.33	9/15/2019		9/14/2020	
9/16/2017	19.48	9/16/2018	9.82	9/16/2019		9/15/2020	
9/17/2017	18.78	9/17/2018	11.70	9/17/2019		9/16/2020	
9/18/2017	8.53	9/18/2018	12.54	9/18/2019		9/17/2020	
9/19/2017	11.42	9/19/2018	14.72	9/19/2019		9/18/2020	
9/20/2017	9.21	9/20/2018	13.13	9/20/2019		9/19/2020	
9/21/2017	8.33	9/21/2018	9.55	9/21/2019		9/20/2020	
9/22/2017	13.42	9/22/2018	8.68	9/22/2019		9/21/2020	
9/23/2017	14.11	9/23/2018	11.30	9/23/2019		9/22/2020	

9/24/2017	15.27	9/24/2018	11.83	9/24/2019		9/23/2020	
9/25/2017	23.73	9/25/2018	16.16	9/25/2019		9/24/2020	
9/26/2017	26.03	9/26/2018	18.20	9/26/2019		9/25/2020	
9/27/2017	22.26	9/27/2018	16.12	9/27/2019		9/26/2020	
9/28/2017	25.35	9/28/2018	16.42	9/28/2019		9/27/2020	
9/29/2017	22.89	9/29/2018	18.68	9/29/2019		9/28/2020	
9/30/2017	7.54	9/30/2018	21.29	9/30/2019		9/29/2020	
10/1/2017	10.41	10/1/2018	23.10	10/1/2019		9/30/2020	21.60
10/2/2017	10.92	10/2/2018	20.98	10/2/2019		10/1/2020	23.89
10/3/2017	13.13	10/3/2018	18.54	10/3/2019		10/2/2020	25.72
10/4/2017	15.39	10/4/2018	20.15	10/4/2019		10/3/2020	18.94
10/5/2017	13.19	10/5/2018	19.94	10/5/2019		10/4/2020	16.24
10/6/2017	11.70	10/6/2018	15.95	10/6/2019		10/5/2020	19.66
10/7/2017	12.43	10/7/2018	15.53	10/7/2019		10/6/2020	17.49
10/8/2017	14.79	10/8/2018	17.32	10/8/2019		10/7/2020	17.17
10/9/2017	20.93	10/9/2018	21.73	10/9/2019		10/8/2020	15.49
10/10/2017	15.87	10/10/2018	28.88	10/10/2019		10/9/2020	15.58
10/11/2017	10.13	10/11/2018	26.92	10/11/2019		10/10/2020	14.65
10/12/2017	11.11	10/12/2018	17.41	10/12/2019		10/11/2020	15.02
10/13/2017	12.23	10/13/2018	11.64	10/13/2019		10/12/2020	15.79
10/14/2017	20.41	10/14/2018	16.13	10/14/2019		10/13/2020	17.97
10/15/2017	40.77	10/15/2018	28.13	10/15/2019		10/14/2020	17.64
10/16/2017	43.90	10/16/2018	33.58	10/16/2019		10/15/2020	17.78
10/17/2017	35.08	10/17/2018	42.46	10/17/2019		10/16/2020	18.66
10/18/2017	30.45	10/18/2018	34.74	10/18/2019		10/17/2020	19.12
10/19/2017	21.44	10/19/2018	31.26	10/19/2019		10/18/2020	20.41
10/20/2017	22.32	10/20/2018	34.03	10/20/2019		10/19/2020	24.22
10/21/2017	16.96	10/21/2018	32.24	10/21/2019		10/20/2020	23.31
10/22/2017	20.31	10/22/2018	30.22	10/22/2019		10/21/2020	33.03
10/23/2017	37.03	10/23/2018	27.98	10/23/2019		10/22/2020	30.63
10/24/2017	40.05	10/24/2018	29.72	10/24/2019	18.82	10/23/2020	26.52
10/25/2017	39.37	10/25/2018	28.77	10/25/2019	28.08	10/24/2020	25.19

10/26/2017	41.99	10/26/2018	27.58	10/26/2019	25.96	10/25/2020	23.87
10/27/2017	41.20	10/27/2018	26.56	10/27/2019	22.33	10/26/2020	19.13
10/28/2017	42.93	10/28/2018	26.57	10/28/2019	26.93	10/27/2020	19.41
10/29/2017	38.45	10/29/2018	24.72	10/29/2019	26.53	10/28/2020	17.24
10/30/2017	31.35	10/30/2018	25.41	10/30/2019	24.06	10/29/2020	18.32
10/31/2017	34.56	10/31/2018	27.42	10/31/2019	21.72	10/30/2020	17.27
11/1/2017	25.57	11/1/2018	28.28	11/1/2019	28.41	10/31/2020	12.98
11/2/2017	26.12	11/2/2018	26.23	11/2/2019	32.79	11/1/2020	13.74
11/3/2017	30.51	11/3/2018	25.45	11/3/2019	27.25	11/2/2020	17.88
11/4/2017	30.84	11/4/2018	33.76	11/4/2019	19.17	11/3/2020	27.49
11/5/2017	26.53	11/5/2018	29.82	11/5/2019	20.97	11/4/2020	27.92
11/6/2017	27.22	11/6/2018	30.21	11/6/2019	25.85	11/5/2020	50.75
11/7/2017	30.77	11/7/2018	36.03	11/7/2019	31.73	11/6/2020	49.33
11/8/2017	30.45	11/8/2018	41.39	11/8/2019	31.89	11/7/2020	48.53
11/9/2017	38.61	11/9/2018	36.68	11/9/2019	20.98	11/8/2020	38.29
11/10/2017	29.44	11/10/2018	34.57	11/10/2019	22.70	11/9/2020	28.71
11/11/2017	37.41	11/11/2018	36.24	11/11/2019	23.53	11/10/2020	26.41
11/12/2017	38.78	11/12/2018	45.98	11/12/2019	29.95	11/11/2020	25.63
11/13/2017	31.52	11/13/2018	37.15	11/13/2019	33.36	11/12/2020	21.36
11/14/2017	33.12	11/14/2018	36.52	11/14/2019	31.14	11/13/2020	25.05
11/15/2017	34.84	11/15/2018	41.77	11/15/2019	25.10	11/14/2020	24.17
11/16/2017	34.12	11/16/2018	53.94	11/16/2019		11/15/2020	21.39
11/17/2017	29.53	11/17/2018	51.34	11/17/2019		11/16/2020	44.48
11/18/2017	31.40	11/18/2018	54.52	11/18/2019		11/17/2020	17.85
11/19/2017	35.69	11/19/2018	59.71	11/19/2019		11/18/2020	20.24
11/20/2017	38.44	11/20/2018	60.32	11/20/2019		11/19/2020	22.74
11/21/2017	45.32	11/21/2018	70.91	11/21/2019		11/20/2020	25.04
11/22/2017	38.70	11/22/2018	81.41	11/22/2019		11/21/2020	30.02
11/23/2017	37.84	11/23/2018	65.70	11/23/2019		11/22/2020	36.85
11/24/2017	40.63	11/24/2018	47.71	11/24/2019		11/23/2020	39.58
11/25/2017	49.78	11/25/2018	51.38	11/25/2019		11/24/2020	38.16
11/26/2017	47.07	11/26/2018	44.57	11/26/2019		11/25/2020	42.63

11/27/2017	45.70	11/27/2018	43.38	11/27/2019		11/26/2020	37.70
11/28/2017	50.41	11/28/2018	49.69	11/28/2019		11/27/2020	44.25
11/29/2017	77.48	11/29/2018	46.91	11/29/2019		11/28/2020	32.95
11/30/2017	63.61	11/30/2018	38.66	11/30/2019		11/29/2020	32.74
12/1/2017	56.89	12/1/2018	35.02	12/1/2019		11/30/2020	32.60
12/2/2017	50.25	12/2/2018	46.41	12/2/2019		12/1/2020	28.20
12/3/2017	45.10	12/3/2018	48.77	12/3/2019		12/2/2020	26.61
12/4/2017	43.50	12/4/2018	46.64	12/4/2019		12/3/2020	27.61
12/5/2017	55.96	12/5/2018	50.44	12/5/2019		12/4/2020	32.22
12/6/2017	48.57	12/6/2018	44.11	12/6/2019		12/5/2020	43.07
12/7/2017	37.51	12/7/2018	44.80	12/7/2019		12/6/2020	41.21
12/8/2017	48.39	12/8/2018	49.33	12/8/2019		12/7/2020	48.61
12/9/2017	43.75	12/9/2018	50.12	12/9/2019		12/8/2020	56.26
12/10/2017	39.21	12/10/2018	40.92	12/10/2019		12/9/2020	64.11
12/11/2017	43.53	12/11/2018	36.76	12/11/2019		12/10/2020	53.45
12/12/2017	44.98	12/12/2018	40.31	12/12/2019		12/11/2020	41.45
12/13/2017	38.71	12/13/2018	34.85	12/13/2019		12/12/2020	43.55
12/14/2017	44.17	12/14/2018	36.98	12/14/2019		12/13/2020	38.40
12/15/2017	43.84	12/15/2018	37.23	12/15/2019		12/14/2020	34.47
12/16/2017	45.78	12/16/2018	40.06	12/16/2019		12/15/2020	34.44
12/17/2017	51.42	12/17/2018	47.85	12/17/2019		12/16/2020	38.86
12/18/2017	50.58	12/18/2018	60.92	12/18/2019	46.21	12/17/2020	33.54
12/19/2017	46.03	12/19/2018	80.33	12/19/2019	47.40	12/18/2020	46.28
12/20/2017	49.25	12/20/2018	77.13	12/20/2019	50.41	12/19/2020	53.60
12/21/2017	46.30	12/21/2018	70.73	12/21/2019	49.91	12/20/2020	56.33
12/22/2017	41.29	12/22/2018	70.33	12/22/2019	50.07	12/21/2020	53.28
12/23/2017	40.07	12/23/2018	59.43	12/23/2019	56.93	12/22/2020	52.43
12/24/2017	44.15	12/24/2018	51.75	12/24/2019	49.15	12/23/2020	55.67
12/25/2017	48.68	12/25/2018	49.73	12/25/2019	51.10	12/24/2020	51.41
12/26/2017	50.49	12/26/2018	50.75	12/26/2019	57.37	12/25/2020	50.42
12/27/2017	48.24	12/27/2018	53.96	12/27/2019	55.69	12/26/2020	52.44
12/28/2017	53.74	12/28/2018	63.10	12/28/2019	54.49	12/27/2020	52.74

12/29/2017	59.57	12/29/2018	57.94	12/29/2019	58.44	12/28/2020	51.70
12/30/2017	49.32	12/30/2018	54.51	12/30/2019	50.29	12/29/2020	52.34
12/31/2017	46.52	12/31/2018	53.97	12/31/2019	57.07	12/30/2020	55.86
						12/31/2020	56.80

PM10

Date	Value	Date	Value	Date	Value	Date	Value
1/1/2017		1/1/2018	78.70	1/1/2019	69.72	1/1/2020	
1/2/2017		1/2/2018	70.06	1/2/2019	73.96	1/2/2020	
1/3/2017		1/3/2018	70.74	1/3/2019	62.42	1/3/2020	
1/4/2017		1/4/2018	74.25	1/4/2019	61.45	1/4/2020	
1/5/2017		1/5/2018	78.69	1/5/2019	72.43	1/5/2020	
1/6/2017		1/6/2018	73.86	1/6/2019	69.43	1/6/2020	47.83
1/7/2017		1/7/2018	72.55	1/7/2019	61.77	1/7/2020	47.41
1/8/2017		1/8/2018	87.55	1/8/2019	56.98	1/8/2020	54.84
1/9/2017		1/9/2018	103.21	1/9/2019	54.04	1/9/2020	46.10
1/10/2017		1/10/2018	95.76	1/10/2019	64.39	1/10/2020	45.05
1/11/2017		1/11/2018	85.71	1/11/2019	82.21	1/11/2020	47.23
1/12/2017		1/12/2018	90.36	1/12/2019	88.66	1/12/2020	53.90
1/13/2017		1/13/2018	80.92	1/13/2019	79.88	1/13/2020	52.65
1/14/2017		1/14/2018	97.36	1/14/2019	71.75	1/14/2020	56.69
1/15/2017		1/15/2018	86.05	1/15/2019	69.67	1/15/2020	51.15
1/16/2017		1/16/2018	83.30	1/16/2019	71.76	1/16/2020	49.37
1/17/2017		1/17/2018	94.04	1/17/2019	75.21	1/17/2020	26.20
1/18/2017		1/18/2018	82.11	1/18/2019	68.87	1/18/2020	29.75
1/19/2017		1/19/2018	89.97	1/19/2019	64.37	1/19/2020	36.22
1/20/2017		1/20/2018	85.15	1/20/2019	78.04	1/20/2020	39.18
1/21/2017		1/21/2018	90.72	1/21/2019	71.48	1/21/2020	54.42
1/22/2017		1/22/2018	97.64	1/22/2019	77.13	1/22/2020	44.43
1/23/2017		1/23/2018	94.99	1/23/2019	32.27	1/23/2020	38.74
1/24/2017		1/24/2018	54.14	1/24/2019	33.08	1/24/2020	55.95

1/25/2017		1/25/2018	53.80	1/25/2019	36.73	1/25/2020	63.20
1/26/2017		1/26/2018	64.61	1/26/2019	15.80	1/26/2020	73.21
1/27/2017		1/27/2018	78.33	1/27/2019	30.99	1/27/2020	63.74
1/28/2017		1/28/2018	88.99	1/28/2019	29.20	1/28/2020	57.64
1/29/2017		1/29/2018	123.03	1/29/2019	35.27	1/29/2020	49.53
1/30/2017		1/30/2018	99.01	1/30/2019	37.24	1/30/2020	36.28
1/31/2017		1/31/2018	116.41	1/31/2019	48.58	1/31/2020	43.67
2/1/2017		2/1/2018	123.58	2/1/2019	54.78	2/1/2020	50.41
2/2/2017		2/2/2018	131.38	2/2/2019	49.33	2/2/2020	47.83
2/3/2017		2/3/2018	109.96	2/3/2019	52.81	2/3/2020	51.08
2/4/2017		2/4/2018	109.58	2/4/2019	52.53	2/4/2020	55.88
2/5/2017		2/5/2018	113.07	2/5/2019	58.81	2/5/2020	53.34
2/6/2017		2/6/2018	116.18	2/6/2019	70.10	2/6/2020	66.40
2/7/2017		2/7/2018	105.03	2/7/2019	42.45	2/7/2020	68.27
2/8/2017		2/8/2018	80.28	2/8/2019	17.64	2/8/2020	64.56
2/9/2017		2/9/2018	93.58	2/9/2019	12.36	2/9/2020	46.79
2/10/2017		2/10/2018	102.80	2/10/2019	27.47	2/10/2020	56.13
2/11/2017		2/11/2018	126.76	2/11/2019	30.37	2/11/2020	58.23
2/12/2017		2/12/2018	120.60	2/12/2019	41.57	2/12/2020	64.51
2/13/2017		2/13/2018	68.56	2/13/2019	40.56	2/13/2020	69.97
2/14/2017		2/14/2018	82.59	2/14/2019	52.17	2/14/2020	72.72
2/15/2017		2/15/2018	65.65	2/15/2019	24.83	2/15/2020	101.15
2/16/2017		2/16/2018	95.29	2/16/2019	16.15	2/16/2020	100.62
2/17/2017		2/17/2018	94.47	2/17/2019	22.03	2/17/2020	86.51
2/18/2017		2/18/2018	104.02	2/18/2019	37.97	2/18/2020	87.31
2/19/2017		2/19/2018	108.31	2/19/2019	42.84	2/19/2020	85.72
2/20/2017		2/20/2018	103.89	2/20/2019	37.10	2/20/2020	87.42
2/21/2017		2/21/2018	110.96	2/21/2019	43.92	2/21/2020	80.82
2/22/2017		2/22/2018	77.80	2/22/2019	48.57	2/22/2020	55.24
2/23/2017		2/23/2018	69.62	2/23/2019	49.91	2/23/2020	42.74
2/24/2017		2/24/2018	91.62	2/24/2019	54.16	2/24/2020	43.92
2/25/2017		2/25/2018	89.55	2/25/2019	31.13	2/25/2020	35.68

2/26/2017		2/26/2018	51.75	2/26/2019	30.66	2/26/2020	20.03
2/27/2017		2/27/2018	76.81	2/27/2019	22.92	2/27/2020	19.83
2/28/2017		2/28/2018	89.36	2/28/2019	18.95	2/28/2020	28.55
3/1/2017		3/1/2018	81.77	3/1/2019	24.36	2/29/2020	36.17
3/2/2017		3/2/2018	53.79	3/2/2019	33.59	3/1/2020	37.66
3/3/2017		3/3/2018	50.35	3/3/2019	33.31	3/2/2020	36.07
3/4/2017		3/4/2018	73.91	3/4/2019	33.48	3/3/2020	32.02
3/5/2017		3/5/2018	81.74	3/5/2019	36.18	3/4/2020	22.75
3/6/2017		3/6/2018	72.23	3/6/2019	32.66	3/5/2020	35.48
3/7/2017		3/7/2018	81.94	3/7/2019	46.05	3/6/2020	41.72
3/8/2017		3/8/2018	83.52	3/8/2019	39.47	3/7/2020	27.03
3/9/2017		3/9/2018	46.14	3/9/2019	32.98	3/8/2020	29.50
3/10/2017		3/10/2018	41.96	3/10/2019		3/9/2020	32.93
3/11/2017		3/11/2018	54.77	3/11/2019		3/10/2020	49.71
3/12/2017		3/12/2018	62.50	3/12/2019	52.44	3/11/2020	53.41
3/13/2017		3/13/2018	76.53	3/13/2019	54.53	3/12/2020	50.44
3/14/2017		3/14/2018	100.21	3/14/2019	51.39	3/13/2020	52.52
3/15/2017		3/15/2018	81.82	3/15/2019	51.20	3/14/2020	31.03
3/16/2017		3/16/2018	34.08	3/16/2019	48.13	3/15/2020	30.68
3/17/2017		3/17/2018	38.54	3/17/2019	66.82	3/16/2020	35.30
3/18/2017		3/18/2018	57.71	3/18/2019	65.27	3/17/2020	37.57
3/19/2017		3/19/2018	84.28	3/19/2019	45.10	3/18/2020	42.73
3/20/2017		3/20/2018	121.60	3/20/2019	36.28	3/19/2020	37.62
3/21/2017		3/21/2018	113.60	3/21/2019	30.05	3/20/2020	33.55
3/22/2017		3/22/2018	81.09	3/22/2019	38.08	3/21/2020	33.42
3/23/2017		3/23/2018	74.60	3/23/2019	49.10	3/22/2020	30.56
3/24/2017		3/24/2018	98.62	3/24/2019	80.33	3/23/2020	22.87
3/25/2017		3/25/2018	133.09	3/25/2019	80.78	3/24/2020	29.90
3/26/2017		3/26/2018	98.92	3/26/2019	35.42	3/25/2020	32.97
3/27/2017		3/27/2018	147.95	3/27/2019	21.94	3/26/2020	36.94
3/28/2017		3/28/2018	142.26	3/28/2019	31.53	3/27/2020	43.83
3/29/2017		3/29/2018	52.47	3/29/2019	54.61	3/28/2020	27.89

3/30/2017		3/30/2018	38.78	3/30/2019	64.70	3/29/2020	32.55
3/31/2017		3/31/2018	42.79	3/31/2019	51.65	3/30/2020	34.33
4/1/2017		4/1/2018	69.58	4/1/2019	23.29	3/31/2020	46.87
4/2/2017		4/2/2018	93.25	4/2/2019	30.85	4/1/2020	47.98
4/3/2017		4/3/2018	98.40	4/3/2019	48.77	4/2/2020	25.17
4/4/2017		4/4/2018	56.19	4/4/2019	56.81	4/3/2020	34.18
4/5/2017		4/5/2018	41.26	4/5/2019	67.83	4/4/2020	37.40
4/6/2017		4/6/2018	45.79	4/6/2019	37.40	4/5/2020	43.40
4/7/2017		4/7/2018	33.07	4/7/2019	22.25	4/6/2020	52.83
4/8/2017		4/8/2018	43.55	4/8/2019	20.30	4/7/2020	67.61
4/9/2017		4/9/2018	47.15	4/9/2019	25.94	4/8/2020	79.97
4/10/2017		4/10/2018	46.59	4/10/2019	27.95	4/9/2020	91.75
4/11/2017		4/11/2018	36.11	4/11/2019	31.48	4/10/2020	89.74
4/12/2017		4/12/2018	25.16	4/12/2019	38.75	4/11/2020	112.30
4/13/2017		4/13/2018	23.34	4/13/2019	39.65	4/12/2020	84.31
4/14/2017		4/14/2018		4/14/2019	31.96	4/13/2020	90.05
4/15/2017		4/15/2018		4/15/2019	30.62	4/14/2020	34.90
4/16/2017		4/16/2018		4/16/2019	30.07	4/15/2020	17.95
4/17/2017		4/17/2018		4/17/2019	27.50	4/16/2020	25.00
4/18/2017		4/18/2018		4/18/2019	21.56	4/17/2020	33.14
4/19/2017		4/19/2018		4/19/2019	23.06	4/18/2020	31.49
4/20/2017		4/20/2018		4/20/2019	27.83	4/19/2020	28.35
4/21/2017		4/21/2018		4/21/2019	45.70	4/20/2020	27.16
4/22/2017		4/22/2018		4/22/2019	39.50	4/21/2020	17.76
4/23/2017		4/23/2018		4/23/2019	45.33	4/22/2020	17.51
4/24/2017		4/24/2018		4/24/2019	42.13	4/23/2020	26.19
4/25/2017		4/25/2018		4/25/2019	41.79	4/24/2020	25.96
4/26/2017		4/26/2018		4/26/2019	41.15	4/25/2020	28.79
4/27/2017		4/27/2018		4/27/2019	42.82	4/26/2020	23.99
4/28/2017		4/28/2018		4/28/2019	39.26	4/27/2020	20.50
4/29/2017		4/29/2018		4/29/2019	47.47	4/28/2020	22.02
4/30/2017		4/30/2018		4/30/2019	43.67	4/29/2020	21.08

5/1/2017		5/1/2018		5/1/2019	41.10	4/30/2020	18.33
5/2/2017		5/2/2018		5/2/2019	31.23	5/1/2020	21.67
5/3/2017		5/3/2018		5/3/2019	31.70	5/2/2020	22.47
5/4/2017		5/4/2018		5/4/2019	26.08	5/3/2020	19.91
5/5/2017		5/5/2018		5/5/2019	25.38	5/4/2020	16.52
5/6/2017		5/6/2018		5/6/2019	36.18	5/5/2020	24.67
5/7/2017		5/7/2018		5/7/2019	46.43	5/6/2020	19.28
5/8/2017		5/8/2018		5/8/2019	63.87	5/7/2020	23.46
5/9/2017		5/9/2018		5/9/2019	66.96	5/8/2020	20.19
5/10/2017		5/10/2018		5/10/2019	70.59	5/9/2020	
5/11/2017		5/11/2018		5/11/2019	50.60	5/10/2020	
5/12/2017		5/12/2018		5/12/2019	51.84	5/11/2020	
5/13/2017		5/13/2018		5/13/2019	34.89	5/12/2020	
5/14/2017		5/14/2018		5/14/2019	37.54	5/13/2020	
5/15/2017		5/15/2018		5/15/2019	34.49	5/14/2020	
5/16/2017		5/16/2018		5/16/2019	42.54	5/15/2020	
5/17/2017		5/17/2018		5/17/2019	33.54	5/16/2020	
5/18/2017		5/18/2018		5/18/2019	32.51	5/17/2020	
5/19/2017		5/19/2018		5/19/2019	31.35	5/18/2020	
5/20/2017		5/20/2018		5/20/2019	37.64	5/19/2020	
5/21/2017		5/21/2018		5/21/2019	39.11	5/20/2020	
5/22/2017		5/22/2018		5/22/2019		5/21/2020	
5/23/2017		5/23/2018		5/23/2019		5/22/2020	
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5/28/2017		5/28/2018		5/28/2019		5/27/2020	
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5/30/2017		5/30/2018		5/30/2019		5/29/2020	
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6/1/2017		6/1/2018		6/1/2019		5/31/2020	

6/2/2017		6/2/2018		6/2/2019		6/1/2020	
6/3/2017		6/3/2018		6/3/2019		6/2/2020	
6/4/2017		6/4/2018		6/4/2019		6/3/2020	
6/5/2017		6/5/2018		6/5/2019		6/4/2020	
6/6/2017		6/6/2018		6/6/2019		6/5/2020	
6/7/2017		6/7/2018		6/7/2019		6/6/2020	
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6/9/2017		6/9/2018		6/9/2019		6/8/2020	
6/10/2017		6/10/2018		6/10/2019		6/9/2020	
6/11/2017		6/11/2018		6/11/2019		6/10/2020	
6/12/2017		6/12/2018		6/12/2019		6/11/2020	
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6/15/2017		6/15/2018		6/15/2019		6/14/2020	
6/16/2017		6/16/2018		6/16/2019	23.62	6/15/2020	
6/17/2017		6/17/2018		6/17/2019	26.37	6/16/2020	
6/18/2017		6/18/2018		6/18/2019	17.95	6/17/2020	
6/19/2017		6/19/2018		6/19/2019	20.74	6/18/2020	
6/20/2017		6/20/2018		6/20/2019	16.97	6/19/2020	
6/21/2017		6/21/2018		6/21/2019	18.22	6/20/2020	
6/22/2017		6/22/2018		6/22/2019	7.18	6/21/2020	
6/23/2017		6/23/2018		6/23/2019	8.56	6/22/2020	
6/24/2017		6/24/2018		6/24/2019	13.58	6/23/2020	
6/25/2017		6/25/2018		6/25/2019	11.81	6/24/2020	
6/26/2017		6/26/2018		6/26/2019	11.54	6/25/2020	
6/27/2017		6/27/2018		6/27/2019	12.42	6/26/2020	
6/28/2017		6/28/2018		6/28/2019	13.40	6/27/2020	
6/29/2017		6/29/2018		6/29/2019	16.55	6/28/2020	
6/30/2017		6/30/2018		6/30/2019	23.61	6/29/2020	
7/1/2017		7/1/2018		7/1/2019	23.72	6/30/2020	
7/2/2017		7/2/2018		7/2/2019	9.88	7/1/2020	
7/3/2017		7/3/2018		7/3/2019	5.89	7/2/2020	

7/4/2017		7/4/2018		7/4/2019	9.09	7/3/2020	
7/5/2017		7/5/2018		7/5/2019	9.55	7/4/2020	
7/6/2017		7/6/2018		7/6/2019	5.22	7/5/2020	
7/7/2017		7/7/2018		7/7/2019	6.60	7/6/2020	
7/8/2017		7/8/2018		7/8/2019	6.41	7/7/2020	
7/9/2017		7/9/2018		7/9/2019	7.01	7/8/2020	
7/10/2017		7/10/2018		7/10/2019	6.27	7/9/2020	
7/11/2017		7/11/2018		7/11/2019	6.74	7/10/2020	
7/12/2017		7/12/2018		7/12/2019	6.57	7/11/2020	
7/13/2017		7/13/2018		7/13/2019	6.29	7/12/2020	
7/14/2017		7/14/2018		7/14/2019	5.46	7/13/2020	
7/15/2017		7/15/2018		7/15/2019	14.57	7/14/2020	
7/16/2017		7/16/2018		7/16/2019	15.99	7/15/2020	
7/17/2017		7/17/2018		7/17/2019	13.80	7/16/2020	
7/18/2017		7/18/2018		7/18/2019	10.69	7/17/2020	
7/19/2017		7/19/2018		7/19/2019	12.32	7/18/2020	
7/20/2017		7/20/2018		7/20/2019	14.06	7/19/2020	
7/21/2017		7/21/2018		7/21/2019	10.95	7/20/2020	
7/22/2017		7/22/2018		7/22/2019	10.26	7/21/2020	
7/23/2017		7/23/2018		7/23/2019	7.76	7/22/2020	
7/24/2017		7/24/2018		7/24/2019	6.23	7/23/2020	
7/25/2017		7/25/2018		7/25/2019	8.79	7/24/2020	
7/26/2017		7/26/2018		7/26/2019	5.87	7/25/2020	
7/27/2017		7/27/2018		7/27/2019	7.10	7/26/2020	
7/28/2017		7/28/2018	12.53	7/28/2019	7.19	7/27/2020	
7/29/2017		7/29/2018	9.13	7/29/2019	8.41	7/28/2020	
7/30/2017		7/30/2018	13.15	7/30/2019	7.02	7/29/2020	
7/31/2017		7/31/2018	14.61	7/31/2019	7.72	7/30/2020	
8/1/2017		8/1/2018	7.77	8/1/2019	7.65	7/31/2020	
8/2/2017		8/2/2018	8.30	8/2/2019	9.71	8/1/2020	
8/3/2017		8/3/2018	7.55	8/3/2019	6.97	8/2/2020	
8/4/2017		8/4/2018	8.08	8/4/2019	9.38	8/3/2020	

8/5/2017		8/5/2018	9.38	8/5/2019	6.98	8/4/2020	
8/6/2017		8/6/2018	11.91	8/6/2019	6.85	8/5/2020	
8/7/2017		8/7/2018	8.65	8/7/2019	5.92	8/6/2020	
8/8/2017		8/8/2018	8.56	8/8/2019	5.68	8/7/2020	
8/9/2017		8/9/2018	13.58	8/9/2019	6.27	8/8/2020	
8/10/2017		8/10/2018	11.71	8/10/2019	7.18	8/9/2020	
8/11/2017		8/11/2018	8.68	8/11/2019	5.75	8/10/2020	
8/12/2017		8/12/2018	11.88	8/12/2019	7.16	8/11/2020	
8/13/2017		8/13/2018	7.78	8/13/2019	6.56	8/12/2020	
8/14/2017		8/14/2018	12.36	8/14/2019	6.69	8/13/2020	
8/15/2017		8/15/2018	8.34	8/15/2019	7.47	8/14/2020	
8/16/2017	8.63	8/16/2018	5.92	8/16/2019	8.93	8/15/2020	
8/17/2017	16.20	8/17/2018	8.37	8/17/2019	9.60	8/16/2020	
8/18/2017	19.90	8/18/2018	8.13	8/18/2019	8.30	8/17/2020	
8/19/2017	13.42	8/19/2018	7.30	8/19/2019	5.34	8/18/2020	
8/20/2017	12.75	8/20/2018	11.88	8/20/2019	8.42	8/19/2020	
8/21/2017	15.58	8/21/2018	8.37	8/21/2019	9.84	8/20/2020	
8/22/2017	11.89	8/22/2018	6.24	8/22/2019	7.31	8/21/2020	
8/23/2017	16.03	8/23/2018	8.27	8/23/2019	10.59	8/22/2020	
8/24/2017	13.80	8/24/2018	7.41	8/24/2019	4.60	8/23/2020	
8/25/2017	16.97	8/25/2018	9.25	8/25/2019	7.66	8/24/2020	
8/26/2017	15.87	8/26/2018	13.49	8/26/2019	7.58	8/25/2020	
8/27/2017	16.19	8/27/2018	6.38	8/27/2019	8.72	8/26/2020	
8/28/2017	11.52	8/28/2018	6.94	8/28/2019	10.76	8/27/2020	
8/29/2017	13.55	8/29/2018	6.56	8/29/2019	9.95	8/28/2020	
8/30/2017	16.30	8/30/2018	8.72	8/30/2019	12.32	8/29/2020	
8/31/2017	13.78	8/31/2018	7.31	8/31/2019	9.84	8/30/2020	
9/1/2017	12.35	9/1/2018	11.05	9/1/2019	7.59	8/31/2020	
9/2/2017	7.43	9/2/2018	8.46	9/2/2019	11.17	9/1/2020	
9/3/2017	7.09	9/3/2018	6.40	9/3/2019		9/2/2020	
9/4/2017	13.28	9/4/2018	10.37	9/4/2019		9/3/2020	
9/5/2017	24.64	9/5/2018	15.13	9/5/2019		9/4/2020	

9/6/2017	34.89	9/6/2018	14.12	9/6/2019		9/5/2020	
9/7/2017	30.45	9/7/2018	7.28	9/7/2019		9/6/2020	
9/8/2017	24.53	9/8/2018	11.99	9/8/2019		9/7/2020	
9/9/2017	27.30	9/9/2018	11.00	9/9/2019		9/8/2020	
9/10/2017	30.06	9/10/2018	7.48	9/10/2019		9/9/2020	
9/11/2017	17.70	9/11/2018	8.12	9/11/2019		9/10/2020	
9/12/2017	17.98	9/12/2018	7.63	9/12/2019		9/11/2020	
9/13/2017	19.51	9/13/2018	7.25	9/13/2019		9/12/2020	
9/14/2017	30.87	9/14/2018	10.50	9/14/2019		9/13/2020	
9/15/2017	38.23	9/15/2018	12.27	9/15/2019		9/14/2020	
9/16/2017	33.96	9/16/2018	11.86	9/16/2019		9/15/2020	
9/17/2017	31.50	9/17/2018	14.41	9/17/2019		9/16/2020	
9/18/2017	13.77	9/18/2018	14.51	9/18/2019		9/17/2020	
9/19/2017	20.10	9/19/2018	17.82	9/19/2019		9/18/2020	
9/20/2017	17.83	9/20/2018	15.84	9/20/2019		9/19/2020	
9/21/2017	11.56	9/21/2018	11.25	9/21/2019		9/20/2020	
9/22/2017	18.71	9/22/2018	11.52	9/22/2019		9/21/2020	
9/23/2017	22.36	9/23/2018	14.43	9/23/2019		9/22/2020	
9/24/2017	23.59	9/24/2018	14.22	9/24/2019		9/23/2020	
9/25/2017	39.01	9/25/2018	19.45	9/25/2019		9/24/2020	
9/26/2017	42.67	9/26/2018	21.28	9/26/2019		9/25/2020	
9/27/2017	35.89	9/27/2018	19.07	9/27/2019		9/26/2020	
9/28/2017	38.80	9/28/2018	19.42	9/28/2019		9/27/2020	
9/29/2017	33.07	9/29/2018	21.54	9/29/2019		9/28/2020	
9/30/2017	10.95	9/30/2018	24.65	9/30/2019		9/29/2020	
10/1/2017	15.96	10/1/2018	26.76	10/1/2019		9/30/2020	28.29
10/2/2017	17.99	10/2/2018	23.84	10/2/2019		10/1/2020	30.82
10/3/2017	20.01	10/3/2018	20.53	10/3/2019		10/2/2020	32.09
10/4/2017	24.83	10/4/2018	22.37	10/4/2019		10/3/2020	25.36
10/5/2017	21.20	10/5/2018	22.17	10/5/2019		10/4/2020	21.80
10/6/2017	20.12	10/6/2018	18.11	10/6/2019		10/5/2020	25.27
10/7/2017	23.79	10/7/2018	17.67	10/7/2019		10/6/2020	24.54

10/8/2017	24.84	10/8/2018	18.86	10/8/2019		10/7/2020	24.57
10/9/2017	33.50	10/9/2018	24.25	10/9/2019		10/8/2020	23.53
10/10/2017	28.64	10/10/2018	32.20	10/10/2019		10/9/2020	23.20
10/11/2017	18.89	10/11/2018	30.04	10/11/2019		10/10/2020	20.29
10/12/2017	21.65	10/12/2018	19.38	10/12/2019		10/11/2020	21.30
10/13/2017	18.92	10/13/2018	13.07	10/13/2019		10/12/2020	20.61
10/14/2017	31.73	10/14/2018	18.05	10/14/2019		10/13/2020	25.05
10/15/2017	59.62	10/15/2018	30.82	10/15/2019		10/14/2020	24.84
10/16/2017	62.11	10/16/2018	36.11	10/16/2019		10/15/2020	25.48
10/17/2017	54.03	10/17/2018	45.15	10/17/2019		10/16/2020	26.96
10/18/2017	48.77	10/18/2018	37.09	10/18/2019		10/17/2020	27.81
10/19/2017	34.45	10/19/2018	35.94	10/19/2019		10/18/2020	30.79
10/20/2017	34.15	10/20/2018	40.98	10/20/2019		10/19/2020	33.94
10/21/2017	25.00	10/21/2018	37.86	10/21/2019		10/20/2020	33.76
10/22/2017	31.50	10/22/2018	36.33	10/22/2019		10/21/2020	45.87
10/23/2017	53.82	10/23/2018	33.89	10/23/2019		10/22/2020	40.73
10/24/2017	62.23	10/24/2018	36.21	10/24/2019	20.60	10/23/2020	34.16
10/25/2017	61.99	10/25/2018	35.01	10/25/2019	29.40	10/24/2020	33.52
10/26/2017	66.05	10/26/2018	34.19	10/26/2019	27.35	10/25/2020	31.16
10/27/2017	59.32	10/27/2018	32.69	10/27/2019	23.18	10/26/2020	25.07
10/28/2017	60.22	10/28/2018	32.94	10/28/2019	27.85	10/27/2020	27.53
10/29/2017	61.48	10/29/2018	30.39	10/29/2019	27.43	10/28/2020	28.07
10/30/2017	51.64	10/30/2018	32.28	10/30/2019	24.87	10/29/2020	31.03
10/31/2017	46.58	10/31/2018	35.19	10/31/2019	22.71	10/30/2020	32.75
11/1/2017	39.69	11/1/2018	35.23	11/1/2019	29.59	10/31/2020	26.45
11/2/2017	41.29	11/2/2018	31.30	11/2/2019	34.27	11/1/2020	23.74
11/3/2017	49.51	11/3/2018	30.79	11/3/2019	28.49	11/2/2020	28.05
11/4/2017	51.10	11/4/2018	39.97	11/4/2019	20.12	11/3/2020	42.42
11/5/2017	47.01	11/5/2018	35.20	11/5/2019	21.84	11/4/2020	39.37
11/6/2017	47.71	11/6/2018	36.17	11/6/2019	26.81	11/5/2020	62.73
11/7/2017	50.38	11/7/2018	42.33	11/7/2019	33.23	11/6/2020	60.37
11/8/2017	55.84	11/8/2018	47.78	11/8/2019	33.18	11/7/2020	60.74

11/9/2017	65.21	11/9/2018	41.31	11/9/2019	21.82	11/8/2020	49.03
11/10/2017	50.45	11/10/2018	40.38	11/10/2019	23.95	11/9/2020	39.84
11/11/2017	62.50	11/11/2018	44.97	11/11/2019	24.67	11/10/2020	40.34
11/12/2017	58.58	11/12/2018	53.11	11/12/2019	31.27	11/11/2020	37.68
11/13/2017	45.90	11/13/2018	41.73	11/13/2019	35.29	11/12/2020	34.69
11/14/2017	53.14	11/14/2018	42.20	11/14/2019	33.21	11/13/2020	38.42
11/15/2017	55.18	11/15/2018	47.66	11/15/2019	25.99	11/14/2020	34.30
11/16/2017	53.72	11/16/2018	60.43	11/16/2019		11/15/2020	27.34
11/17/2017	44.08	11/17/2018	57.32	11/17/2019		11/16/2020	56.38
11/18/2017	48.61	11/18/2018	60.75	11/18/2019		11/17/2020	22.62
11/19/2017	54.39	11/19/2018	66.46	11/19/2019		11/18/2020	30.30
11/20/2017	64.33	11/20/2018	66.83	11/20/2019		11/19/2020	31.65
11/21/2017	71.05	11/21/2018	78.52	11/21/2019		11/20/2020	32.44
11/22/2017	59.72	11/22/2018	89.28	11/22/2019		11/21/2020	37.72
11/23/2017	61.14	11/23/2018	75.25	11/23/2019		11/22/2020	44.12
11/24/2017	60.66	11/24/2018	55.54	11/24/2019		11/23/2020	46.53
11/25/2017	82.05	11/25/2018	60.32	11/25/2019		11/24/2020	46.02
11/26/2017	76.56	11/26/2018	52.30	11/26/2019		11/25/2020	53.69
11/27/2017	70.82	11/27/2018	50.81	11/27/2019		11/26/2020	50.18
11/28/2017	75.37	11/28/2018	57.08	11/28/2019		11/27/2020	54.21
11/29/2017	108.05	11/29/2018	53.58	11/29/2019		11/28/2020	47.12
11/30/2017	86.75	11/30/2018	44.18	11/30/2019		11/29/2020	40.78
12/1/2017	79.15	12/1/2018	40.71	12/1/2019		11/30/2020	40.74
12/2/2017	74.93	12/2/2018	53.45	12/2/2019		12/1/2020	37.14
12/3/2017	70.53	12/3/2018	55.16	12/3/2019		12/2/2020	34.96
12/4/2017	68.31	12/4/2018	53.63	12/4/2019		12/3/2020	34.71
12/5/2017	81.56	12/5/2018	58.66	12/5/2019		12/4/2020	43.00
12/6/2017	69.92	12/6/2018	50.72	12/6/2019		12/5/2020	56.06
12/7/2017	52.69	12/7/2018	51.44	12/7/2019		12/6/2020	48.95
12/8/2017	68.59	12/8/2018	56.45	12/8/2019		12/7/2020	57.89
12/9/2017	65.64	12/9/2018	57.23	12/9/2019		12/8/2020	64.88
12/10/2017	66.33	12/10/2018	49.32	12/10/2019		12/9/2020	70.83

12/11/2017	70.78	12/11/2018	45.52	12/11/2019		12/10/2020	58.45
12/12/2017	66.30	12/12/2018	51.36	12/12/2019		12/11/2020	46.25
12/13/2017	58.79	12/13/2018	44.16	12/13/2019		12/12/2020	51.87
12/14/2017	70.67	12/14/2018	46.84	12/14/2019		12/13/2020	45.09
12/15/2017	68.13	12/15/2018	47.18	12/15/2019		12/14/2020	42.92
12/16/2017	68.28	12/16/2018	50.83	12/16/2019		12/15/2020	41.36
12/17/2017	73.71	12/17/2018	59.69	12/17/2019		12/16/2020	47.05
12/18/2017	73.48	12/18/2018	71.20	12/18/2019	46.21	12/17/2020	42.87
12/19/2017	68.51	12/19/2018	92.92	12/19/2019	47.40	12/18/2020	58.08
12/20/2017	76.74	12/20/2018	85.85	12/20/2019	50.41	12/19/2020	60.92
12/21/2017	71.62	12/21/2018	78.79	12/21/2019	49.91	12/20/2020	69.61
12/22/2017	62.34	12/22/2018	80.21	12/22/2019	50.07	12/21/2020	65.75
12/23/2017	59.08	12/23/2018	69.54	12/23/2019	56.93	12/22/2020	65.88
12/24/2017	68.65	12/24/2018	60.86	12/24/2019	49.15	12/23/2020	69.39
12/25/2017	73.90	12/25/2018	57.20	12/25/2019	51.10	12/24/2020	64.27
12/26/2017	82.33	12/26/2018	59.55	12/26/2019	57.37	12/25/2020	62.53
12/27/2017	84.46	12/27/2018	63.95	12/27/2019	55.69	12/26/2020	61.96
12/28/2017	91.77	12/28/2018	75.07	12/28/2019	54.49	12/27/2020	64.60
12/29/2017	105.46	12/29/2018	68.12	12/29/2019	58.44	12/28/2020	61.78
12/30/2017	88.69	12/30/2018	64.79	12/30/2019	50.29	12/29/2020	62.38
12/31/2017	85.09	12/31/2018	64.57	12/31/2019	57.07	12/30/2020	66.63
						12/31/2020	69.80

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Date	Value	Date	Value	Date	Value	Date	Value
1/1/2017		1/1/2018	137.63	1/1/2019	99.17	1/1/2020	
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1/3/2017		1/3/2018	122.13	1/3/2019	90.55	1/3/2020	
1/4/2017		1/4/2018	129.29	1/4/2019	88.31	1/4/2020	
1/5/2017		1/5/2018	141.47	1/5/2019	100.58	1/5/2020	
1/6/2017		1/6/2018	117.79	1/6/2019	93.68	1/6/2020	50.99
1/7/2017		1/7/2018	134.49	1/7/2019	104.72	1/7/2020	56.84
1/8/2017		1/8/2018	169.64	1/8/2019	86.13	1/8/2020	57.09
1/9/2017		1/9/2018	166.49	1/9/2019	86.51	1/9/2020	48.21
1/10/2017		1/10/2018	138.53	1/10/2019	100.64	1/10/2020	55.37
1/11/2017		1/11/2018	140.24	1/11/2019	110.96	1/11/2020	49.47
1/12/2017		1/12/2018	157.15	1/12/2019	108.72	1/12/2020	56.91
1/13/2017		1/13/2018	120.92	1/13/2019	110.81	1/13/2020	56.69
1/14/2017		1/14/2018	150.76	1/14/2019	98.23	1/14/2020	62.02
1/15/2017		1/15/2018	140.98	1/15/2019	87.56	1/15/2020	55.55
1/16/2017		1/16/2018	147.17	1/16/2019	106.93	1/16/2020	49.52
1/17/2017		1/17/2018	162.02	1/17/2019	111.70	1/17/2020	26.24
1/18/2017		1/18/2018	139.96	1/18/2019	91.75	1/18/2020	31.10
1/19/2017		1/19/2018	150.84	1/19/2019	101.01	1/19/2020	40.31
1/20/2017		1/20/2018	138.66	1/20/2019	116.70	1/20/2020	48.88
1/21/2017		1/21/2018	155.12	1/21/2019	104.81	1/21/2020	63.75
1/22/2017		1/22/2018	167.99	1/22/2019	227.30	1/22/2020	52.33
1/23/2017		1/23/2018	157.62	1/23/2019	34.59	1/23/2020	42.20
1/24/2017		1/24/2018	97.80	1/24/2019	50.70	1/24/2020	71.10
1/25/2017		1/25/2018	97.54	1/25/2019	61.27	1/25/2020	75.88
1/26/2017		1/26/2018	120.70	1/26/2019	19.73	1/26/2020	87.71
1/27/2017		1/27/2018	165.08	1/27/2019	40.01	1/27/2020	73.49
1/28/2017		1/28/2018	147.32	1/28/2019	57.62	1/28/2020	70.46
1/29/2017		1/29/2018	206.56	1/29/2019	55.04	1/29/2020	67.99
1/30/2017		1/30/2018	165.81	1/30/2019	54.65	1/30/2020	50.60

1/31/2017		1/31/2018	167.74	1/31/2019	62.12	1/31/2020	53.97
2/1/2017		2/1/2018	207.55	2/1/2019	69.07	2/1/2020	67.60
2/2/2017		2/2/2018	219.95	2/2/2019	61.13	2/2/2020	62.19
2/3/2017		2/3/2018	163.12	2/3/2019	69.77	2/3/2020	65.59
2/4/2017		2/4/2018	185.36	2/4/2019	78.49	2/4/2020	78.66
2/5/2017		2/5/2018	182.54	2/5/2019	81.25	2/5/2020	71.59
2/6/2017		2/6/2018	156.79	2/6/2019	99.47	2/6/2020	88.10
2/7/2017		2/7/2018	157.56	2/7/2019	42.67	2/7/2020	83.45
2/8/2017		2/8/2018	131.57	2/8/2019	22.94	2/8/2020	89.26
2/9/2017		2/9/2018	182.06	2/9/2019	18.66	2/9/2020	74.82
2/10/2017		2/10/2018	212.80	2/10/2019	41.03	2/10/2020	76.80
2/11/2017		2/11/2018	221.09	2/11/2019	46.52	2/11/2020	81.47
2/12/2017		2/12/2018	191.31	2/12/2019	55.51	2/12/2020	84.76
2/13/2017		2/13/2018	105.05	2/13/2019	56.32	2/13/2020	99.68
2/14/2017		2/14/2018	145.20	2/14/2019	62.82	2/14/2020	99.09
2/15/2017		2/15/2018	117.90	2/15/2019	49.35	2/15/2020	121.18
2/16/2017		2/16/2018	186.25	2/16/2019	28.35	2/16/2020	141.47
2/17/2017		2/17/2018	174.34	2/17/2019	31.82	2/17/2020	116.14
2/18/2017		2/18/2018	165.49	2/18/2019	57.30	2/18/2020	117.23
2/19/2017		2/19/2018	169.33	2/19/2019	59.87	2/19/2020	108.36
2/20/2017		2/20/2018	152.37	2/20/2019	52.80	2/20/2020	107.10
2/21/2017		2/21/2018	176.57	2/21/2019	68.85	2/21/2020	83.63
2/22/2017		2/22/2018	142.06	2/22/2019	75.99	2/22/2020	71.38
2/23/2017		2/23/2018	96.68	2/23/2019	79.03	2/23/2020	73.16
2/24/2017		2/24/2018	133.22	2/24/2019	74.39	2/24/2020	93.89
2/25/2017		2/25/2018	131.18	2/25/2019	100.17	2/25/2020	42.50
2/26/2017		2/26/2018	80.54	2/26/2019	96.23	2/26/2020	20.80
2/27/2017		2/27/2018	120.52	2/27/2019	25.14	2/27/2020	24.46
2/28/2017		2/28/2018	128.37	2/28/2019	23.24	2/28/2020	38.91
3/1/2017		3/1/2018	125.15	3/1/2019	37.58	2/29/2020	49.40
3/2/2017		3/2/2018	83.96	3/2/2019	46.14	3/1/2020	57.53
3/3/2017		3/3/2018	89.56	3/3/2019	42.76	3/2/2020	65.11

3/4/2017		3/4/2018	140.68	3/4/2019	48.54	3/3/2020	51.95
3/5/2017		3/5/2018	154.97	3/5/2019	48.68	3/4/2020	37.99
3/6/2017		3/6/2018	183.80	3/6/2019	61.73	3/5/2020	57.99
3/7/2017		3/7/2018	191.56	3/7/2019	85.91	3/6/2020	69.95
3/8/2017		3/8/2018	260.75	3/8/2019	60.14	3/7/2020	31.14
3/9/2017		3/9/2018	99.44	3/9/2019	47.17	3/8/2020	43.73
3/10/2017		3/10/2018	72.11	3/10/2019		3/9/2020	51.02
3/11/2017		3/11/2018	82.61	3/11/2019		3/10/2020	88.27
3/12/2017		3/12/2018	85.69	3/12/2019	104.03	3/11/2020	72.55
3/13/2017		3/13/2018	119.22	3/13/2019	98.35	3/12/2020	72.89
3/14/2017		3/14/2018	170.31	3/14/2019	101.08	3/13/2020	87.66
3/15/2017		3/15/2018	165.16	3/15/2019	175.38	3/14/2020	67.91
3/16/2017		3/16/2018	61.05	3/16/2019	89.46	3/15/2020	98.24
3/17/2017		3/17/2018	81.31	3/17/2019	122.74	3/16/2020	71.71
3/18/2017		3/18/2018	120.50	3/18/2019	126.80	3/17/2020	79.86
3/19/2017		3/19/2018	150.39	3/19/2019	81.91	3/18/2020	66.11
3/20/2017		3/20/2018	283.73	3/20/2019	60.49	3/19/2020	45.01
3/21/2017		3/21/2018	190.47	3/21/2019	57.25	3/20/2020	36.74
3/22/2017		3/22/2018	214.65	3/22/2019	86.92	3/21/2020	44.54
3/23/2017		3/23/2018	191.44	3/23/2019	99.80	3/22/2020	38.51
3/24/2017		3/24/2018	218.18	3/24/2019	135.25	3/23/2020	29.06
3/25/2017		3/25/2018	360.90	3/25/2019	147.08	3/24/2020	39.80
3/26/2017		3/26/2018	194.27	3/26/2019	59.71	3/25/2020	39.00
3/27/2017		3/27/2018	280.99	3/27/2019	42.73	3/26/2020	39.33
3/28/2017		3/28/2018	282.61	3/28/2019	60.01	3/27/2020	51.61
3/29/2017		3/29/2018	90.48	3/29/2019	90.41	3/28/2020	42.26
3/30/2017		3/30/2018	65.44	3/30/2019	69.42	3/29/2020	54.43
3/31/2017		3/31/2018	71.80	3/31/2019	75.28	3/30/2020	56.22
4/1/2017		4/1/2018	151.17	4/1/2019	57.09	3/31/2020	65.29
4/2/2017		4/2/2018	192.19	4/2/2019	65.22	4/1/2020	57.80
4/3/2017		4/3/2018	210.44	4/3/2019	84.80	4/2/2020	48.94
4/4/2017		4/4/2018	77.15	4/4/2019	90.51	4/3/2020	50.18

4/5/2017		4/5/2018	68.27	4/5/2019	77.03	4/4/2020	90.68
4/6/2017		4/6/2018	84.78	4/6/2019	38.35	4/5/2020	70.01
4/7/2017		4/7/2018	50.91	4/7/2019	31.85	4/6/2020	84.81
4/8/2017		4/8/2018	81.87	4/8/2019	36.12	4/7/2020	102.25
4/9/2017		4/9/2018	95.01	4/9/2019	45.82	4/8/2020	125.32
4/10/2017		4/10/2018	89.10	4/10/2019	49.72	4/9/2020	126.05
4/11/2017		4/11/2018	52.47	4/11/2019	55.95	4/10/2020	126.40
4/12/2017		4/12/2018	58.84	4/12/2019	68.33	4/11/2020	146.76
4/13/2017		4/13/2018	39.40	4/13/2019	54.64	4/12/2020	113.71
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4/17/2017		4/17/2018		4/17/2019	36.84	4/16/2020	43.91
4/18/2017		4/18/2018		4/18/2019	56.94	4/17/2020	52.70
4/19/2017		4/19/2018		4/19/2019	40.92	4/18/2020	49.46
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4/21/2017		4/21/2018		4/21/2019	70.83	4/20/2020	47.97
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4/30/2017		4/30/2018		4/30/2019	67.76	4/29/2020	28.50
5/1/2017		5/1/2018		5/1/2019	72.32	4/30/2020	24.15
5/2/2017		5/2/2018		5/2/2019	62.70	5/1/2020	25.76
5/3/2017		5/3/2018		5/3/2019	50.88	5/2/2020	25.79
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5/5/2017		5/5/2018		5/5/2019	47.44	5/4/2020	24.78
5/6/2017		5/6/2018		5/6/2019	57.08	5/5/2020	35.38

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5/8/2017		5/8/2018		5/8/2019	95.78	5/7/2020	32.60
5/9/2017		5/9/2018		5/9/2019	108.52	5/8/2020	33.65
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7/17/2017		7/17/2018		7/17/2019	16.59	7/16/2020	
7/18/2017		7/18/2018		7/18/2019	13.51	7/17/2020	
7/19/2017		7/19/2018		7/19/2019	15.99	7/18/2020	
7/20/2017		7/20/2018		7/20/2019	16.85	7/19/2020	
7/21/2017		7/21/2018		7/21/2019	14.81	7/20/2020	
7/22/2017		7/22/2018		7/22/2019	13.53	7/21/2020	
7/23/2017		7/23/2018		7/23/2019	8.12	7/22/2020	
7/24/2017		7/24/2018		7/24/2019	6.45	7/23/2020	
7/25/2017		7/25/2018		7/25/2019	10.73	7/24/2020	
7/26/2017		7/26/2018		7/26/2019	6.75	7/25/2020	
7/27/2017		7/27/2018		7/27/2019	8.89	7/26/2020	
7/28/2017		7/28/2018	50.59	7/28/2019	9.73	7/27/2020	
7/29/2017		7/29/2018	13.46	7/29/2019	13.93	7/28/2020	
7/30/2017		7/30/2018	15.57	7/30/2019	10.69	7/29/2020	
7/31/2017		7/31/2018	18.30	7/31/2019	10.21	7/30/2020	
8/1/2017		8/1/2018	9.00	8/1/2019	7.96	7/31/2020	
8/2/2017		8/2/2018	12.27	8/2/2019	12.43	8/1/2020	
8/3/2017		8/3/2018	12.05	8/3/2019	9.09	8/2/2020	
8/4/2017		8/4/2018	9.68	8/4/2019	11.31	8/3/2020	
8/5/2017		8/5/2018	12.08	8/5/2019	8.62	8/4/2020	
8/6/2017		8/6/2018	13.21	8/6/2019	9.64	8/5/2020	
8/7/2017		8/7/2018	17.20	8/7/2019	8.51	8/6/2020	
8/8/2017		8/8/2018	16.02	8/8/2019	8.85	8/7/2020	
8/9/2017		8/9/2018	22.13	8/9/2019	9.32	8/8/2020	
8/10/2017		8/10/2018	16.32	8/10/2019	9.75	8/9/2020	

8/11/2017		8/11/2018	9.09	8/11/2019	7.37	8/10/2020	
8/12/2017		8/12/2018	12.60	8/12/2019	12.14	8/11/2020	
8/13/2017		8/13/2018	9.36	8/13/2019	9.42	8/12/2020	
8/14/2017		8/14/2018	13.86	8/14/2019	10.86	8/13/2020	
8/15/2017		8/15/2018	13.01	8/15/2019	7.92	8/14/2020	
8/16/2017	14.89	8/16/2018	12.56	8/16/2019	12.06	8/15/2020	
8/17/2017	25.84	8/17/2018	11.74	8/17/2019	11.32	8/16/2020	
8/18/2017	31.82	8/18/2018	11.12	8/18/2019	11.82	8/17/2020	
8/19/2017	23.31	8/19/2018	10.74	8/19/2019	6.55	8/18/2020	
8/20/2017	21.08	8/20/2018	16.23	8/20/2019	10.90	8/19/2020	
8/21/2017	25.59	8/21/2018	13.63	8/21/2019	14.26	8/20/2020	
8/22/2017	19.25	8/22/2018	9.61	8/22/2019	8.49	8/21/2020	
8/23/2017	26.41	8/23/2018	11.34	8/23/2019	15.27	8/22/2020	
8/24/2017	26.99	8/24/2018	7.87	8/24/2019	5.38	8/23/2020	
8/25/2017	32.99	8/25/2018	9.77	8/25/2019	8.17	8/24/2020	
8/26/2017	28.89	8/26/2018	17.36	8/26/2019	10.28	8/25/2020	
8/27/2017	30.53	8/27/2018	9.82	8/27/2019	13.69	8/26/2020	
8/28/2017	21.76	8/28/2018	10.23	8/28/2019	16.00	8/27/2020	
8/29/2017	29.44	8/29/2018	10.64	8/29/2019	10.52	8/28/2020	
8/30/2017	30.91	8/30/2018	10.47	8/30/2019	16.00	8/29/2020	
8/31/2017	26.49	8/31/2018	8.56	8/31/2019	12.27	8/30/2020	
9/1/2017	22.53	9/1/2018	16.37	9/1/2019	7.71	8/31/2020	
9/2/2017	13.53	9/2/2018	9.70	9/2/2019	11.82	9/1/2020	
9/3/2017	11.54	9/3/2018	11.03	9/3/2019		9/2/2020	
9/4/2017	25.15	9/4/2018	16.39	9/4/2019		9/3/2020	
9/5/2017	42.12	9/5/2018	21.31	9/5/2019		9/4/2020	
9/6/2017	60.48	9/6/2018	17.57	9/6/2019		9/5/2020	
9/7/2017	49.18	9/7/2018	13.98	9/7/2019		9/6/2020	
9/8/2017	37.45	9/8/2018	17.67	9/8/2019		9/7/2020	
9/9/2017	41.84	9/9/2018	18.87	9/9/2019		9/8/2020	
9/10/2017	50.58	9/10/2018	7.79	9/10/2019		9/9/2020	
9/11/2017	29.56	9/11/2018	8.23	9/11/2019		9/10/2020	

9/12/2017	27.15	9/12/2018	7.88	9/12/2019		9/11/2020	
9/13/2017	32.88	9/13/2018	8.05	9/13/2019		9/12/2020	
9/14/2017	52.76	9/14/2018	13.59	9/14/2019		9/13/2020	
9/15/2017	59.09	9/15/2018	17.34	9/15/2019		9/14/2020	
9/16/2017	59.26	9/16/2018	16.28	9/16/2019		9/15/2020	
9/17/2017	50.90	9/17/2018	18.67	9/17/2019		9/16/2020	
9/18/2017	27.44	9/18/2018	17.05	9/18/2019		9/17/2020	
9/19/2017	38.76	9/19/2018	25.37	9/19/2019		9/18/2020	
9/20/2017	41.72	9/20/2018	23.40	9/20/2019		9/19/2020	
9/21/2017	16.66	9/21/2018	11.57	9/21/2019		9/20/2020	
9/22/2017	26.97	9/22/2018	12.47	9/22/2019		9/21/2020	
9/23/2017	41.39	9/23/2018	20.14	9/23/2019		9/22/2020	
9/24/2017	40.38	9/24/2018	20.12	9/24/2019		9/23/2020	
9/25/2017	66.86	9/25/2018	26.50	9/25/2019		9/24/2020	
9/26/2017	74.53	9/26/2018	27.15	9/26/2019		9/25/2020	
9/27/2017	56.97	9/27/2018	27.29	9/27/2019		9/26/2020	
9/28/2017	55.19	9/28/2018	34.37	9/28/2019		9/27/2020	
9/29/2017	44.46	9/29/2018	35.03	9/29/2019		9/28/2020	
9/30/2017	16.61	9/30/2018	38.65	9/30/2019		9/29/2020	
10/1/2017	26.26	10/1/2018	38.36	10/1/2019		9/30/2020	34.84
10/2/2017	34.61	10/2/2018	39.61	10/2/2019		10/1/2020	38.70
10/3/2017	32.21	10/3/2018	30.79	10/3/2019		10/2/2020	40.48
10/4/2017	43.72	10/4/2018	27.80	10/4/2019		10/3/2020	31.65
10/5/2017	38.74	10/5/2018	31.98	10/5/2019		10/4/2020	31.11
10/6/2017	39.99	10/6/2018	28.64	10/6/2019		10/5/2020	35.38
10/7/2017	53.71	10/7/2018	29.56	10/7/2019		10/6/2020	50.41
10/8/2017	46.62	10/8/2018	27.19	10/8/2019		10/7/2020	48.93
10/9/2017	60.97	10/9/2018	36.62	10/9/2019		10/8/2020	68.47
10/10/2017	59.60	10/10/2018	48.43	10/10/2019		10/9/2020	43.80
10/11/2017	41.29	10/11/2018	48.35	10/11/2019		10/10/2020	36.55
10/12/2017	51.38	10/12/2018	37.14	10/12/2019		10/11/2020	37.97
10/13/2017	34.29	10/13/2018	21.74	10/13/2019		10/12/2020	31.14

10/14/2017	52.92	10/14/2018	30.28	10/14/2019		10/13/2020	38.24
10/15/2017	79.93	10/15/2018	43.05	10/15/2019		10/14/2020	43.52
10/16/2017	85.35	10/16/2018	47.33	10/16/2019		10/15/2020	45.24
10/17/2017	80.58	10/17/2018	55.37	10/17/2019		10/16/2020	44.35
10/18/2017	86.47	10/18/2018	45.80	10/18/2019		10/17/2020	55.00
10/19/2017	62.99	10/19/2018	40.03	10/19/2019		10/18/2020	55.86
10/20/2017	56.16	10/20/2018	51.46	10/20/2019		10/19/2020	59.14
10/21/2017	37.90	10/21/2018	46.86	10/21/2019		10/20/2020	72.95
10/22/2017	51.45	10/22/2018	46.82	10/22/2019		10/21/2020	68.87
10/23/2017	76.72	10/23/2018	47.35	10/23/2019		10/22/2020	57.90
10/24/2017	97.22	10/24/2018	51.75	10/24/2019	29.99	10/23/2020	135.87
10/25/2017	106.51	10/25/2018	50.37	10/25/2019	33.27	10/24/2020	52.14
10/26/2017	106.95	10/26/2018	53.99	10/26/2019	33.57	10/25/2020	61.03
10/27/2017	83.27	10/27/2018	53.79	10/27/2019	26.43	10/26/2020	48.64
10/28/2017	84.46	10/28/2018	52.45	10/28/2019	30.65	10/27/2020	48.83
10/29/2017	110.90	10/29/2018	46.51	10/29/2019	30.57	10/28/2020	48.04
10/30/2017	98.33	10/30/2018	63.18	10/30/2019	26.89	10/29/2020	61.99
10/31/2017	63.48	10/31/2018	64.11	10/31/2019	26.76	10/30/2020	84.91
11/1/2017	77.87	11/1/2018	55.63	11/1/2019	32.82	10/31/2020	91.30
11/2/2017	78.85	11/2/2018	48.43	11/2/2019	39.36	11/1/2020	71.60
11/3/2017	96.78	11/3/2018	50.37	11/3/2019	33.03	11/2/2020	65.68
11/4/2017	102.19	11/4/2018	58.62	11/4/2019	22.50	11/3/2020	117.45
11/5/2017	99.33	11/5/2018	52.19	11/5/2019	24.18	11/4/2020	76.67
11/6/2017	102.64	11/6/2018	54.64	11/6/2019	29.83	11/5/2020	85.25
11/7/2017	89.97	11/7/2018	57.44	11/7/2019	39.01	11/6/2020	95.97
11/8/2017	114.36	11/8/2018	63.78	11/8/2019	37.23	11/7/2020	95.65
11/9/2017	121.51	11/9/2018	54.63	11/9/2019	25.42	11/8/2020	70.72
11/10/2017	104.52	11/10/2018	58.61	11/10/2019	30.59	11/9/2020	82.88
11/11/2017	124.12	11/11/2018	72.05	11/11/2019	28.85	11/10/2020	81.41
11/12/2017	95.16	11/12/2018	73.01	11/12/2019	37.70	11/11/2020	60.93
11/13/2017	73.44	11/13/2018	61.79	11/13/2019	42.61	11/12/2020	70.03
11/14/2017	96.92	11/14/2018	63.92	11/14/2019	41.31	11/13/2020	88.78

11/15/2017	92.58	11/15/2018	69.36	11/15/2019	26.15	11/14/2020	63.50
11/16/2017	92.05	11/16/2018	80.90	11/16/2019		11/15/2020	52.56
11/17/2017	77.31	11/17/2018	77.64	11/17/2019		11/16/2020	119.27
11/18/2017	80.12	11/18/2018	80.71	11/18/2019		11/17/2020	43.13
11/19/2017	93.94	11/19/2018	85.97	11/19/2019		11/18/2020	85.66
11/20/2017	123.45	11/20/2018	84.78	11/20/2019		11/19/2020	69.07
11/21/2017	122.29	11/21/2018	97.65	11/21/2019		11/20/2020	80.42
11/22/2017	99.68	11/22/2018	114.25	11/22/2019		11/21/2020	60.20
11/23/2017	107.35	11/23/2018	107.56	11/23/2019		11/22/2020	73.92
11/24/2017	89.97	11/24/2018	92.52	11/24/2019		11/23/2020	81.13
11/25/2017	157.70	11/25/2018	98.57	11/25/2019		11/24/2020	78.69
11/26/2017	142.91	11/26/2018	74.32	11/26/2019		11/25/2020	73.79
11/27/2017	123.99	11/27/2018	76.52	11/27/2019		11/26/2020	112.31
11/28/2017	119.83	11/28/2018	74.36	11/28/2019		11/27/2020	89.19
11/29/2017	151.48	11/29/2018	71.08	11/29/2019		11/28/2020	130.98
11/30/2017	123.05	11/30/2018	63.22	11/30/2019		11/29/2020	63.03
12/1/2017	116.04	12/1/2018	67.66	12/1/2019		11/30/2020	52.56
12/2/2017	117.14	12/2/2018	72.50	12/2/2019		12/1/2020	66.65
12/3/2017	116.76	12/3/2018	74.30	12/3/2019		12/2/2020	51.73
12/4/2017	109.87	12/4/2018	76.26	12/4/2019		12/3/2020	70.76
12/5/2017	113.23	12/5/2018	79.54	12/5/2019		12/4/2020	76.81
12/6/2017	107.20	12/6/2018	69.42	12/6/2019		12/5/2020	82.00
12/7/2017	76.15	12/7/2018	66.38	12/7/2019		12/6/2020	65.49
12/8/2017	101.64	12/8/2018	80.15	12/8/2019		12/7/2020	77.18
12/9/2017	101.91	12/9/2018	76.11	12/9/2019		12/8/2020	86.08
12/10/2017	110.98	12/10/2018	68.36	12/10/2019		12/9/2020	77.74
12/11/2017	112.81	12/11/2018	65.07	12/11/2019		12/10/2020	64.16
12/12/2017	97.19	12/12/2018	78.98	12/12/2019		12/11/2020	49.92
12/13/2017	91.47	12/13/2018	64.42	12/13/2019		12/12/2020	80.51
12/14/2017	120.01	12/14/2018	68.52	12/14/2019		12/13/2020	53.40
12/15/2017	113.06	12/15/2018	71.51	12/15/2019		12/14/2020	56.15
12/16/2017	107.86	12/16/2018	74.79	12/16/2019		12/15/2020	61.75

12/17/2017	112.60	12/17/2018	86.90	12/17/2019		12/16/2020	64.86
12/18/2017	117.01	12/18/2018	93.72	12/18/2019	46.21	12/17/2020	75.76
12/19/2017	115.18	12/19/2018	144.50	12/19/2019	47.40	12/18/2020	75.39
12/20/2017	124.58	12/20/2018	103.50	12/20/2019	50.41	12/19/2020	70.17
12/21/2017	126.73	12/21/2018	97.82	12/21/2019	49.91	12/20/2020	93.11
12/22/2017	104.57	12/22/2018	103.48	12/22/2019	50.07	12/21/2020	82.63
12/23/2017	91.69	12/23/2018	94.26	12/23/2019	56.93	12/22/2020	87.96
12/24/2017	107.62	12/24/2018	82.81	12/24/2019	49.15	12/23/2020	90.88
12/25/2017	120.68	12/25/2018	77.13	12/25/2019	51.10	12/24/2020	85.68
12/26/2017	156.39	12/26/2018	95.12	12/26/2019	57.37	12/25/2020	87.24
12/27/2017	158.45	12/27/2018	89.55	12/27/2019	55.69	12/26/2020	78.45
12/28/2017	164.86	12/28/2018	108.06	12/28/2019	54.49	12/27/2020	85.95
12/29/2017	198.42	12/29/2018	101.86	12/29/2019	58.44	12/28/2020	80.63
12/30/2017	170.19	12/30/2018	97.83	12/30/2019	50.29	12/29/2020	80.12
12/31/2017	168.54	12/31/2018	87.62	12/31/2019	57.07	12/30/2020	85.76
						12/31/2020	84.37