



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

# Air quality status of Nepal 2019-2020

Volume XVII

Dhankuta air quality monitoring station



All rights reserved. DoEnv encourages the reproduction and dissemination of material in this information products.

First online edition

© DoEnv 2021

## Contents

1	Dhankuta Air Quality Monitoring Station .....	6
2	Air Quality Status of Dhankuta station (2019-2020).....	6
2.1	Air quality status, 2019.....	6
2.1.1	Temporal variation of PM1.....	6
2.1.2	Temporal Variation of PM2.5 .....	9
2.1.3	Temporal variation of PM10 .....	12
2.1.4	Temporal Variation of TSP .....	15
2.2	Air Quality Status, 2020.....	18
2.2.1	Annual average of PM1, PM2.5, PM10 and TSP.....	18
2.2.2	Temporal Variation of PM2.5 .....	21
2.2.3	Temporal variation of PM10 .....	25
2.2.4	Temporal Variation of TSP .....	28

## Lists of Figures

Figure 1: Histogram of PM <sub>1</sub> .....	6
Figure 2: Daily average of PM <sub>1</sub> .....	7
Figure 3: Monthly Average of PM <sub>1</sub> .....	7
Figure 4: Monthly Variation of PM <sub>1</sub> .....	8
Figure 5: Monthly Variation of PM <sub>1</sub> .....	8
Figure 6: Histogram of PM <sub>2.5</sub> .....	9
Figure 7: Daily average of PM <sub>2.5</sub> .....	9
Figure 8: Monthly Average of PM <sub>2.5</sub> .....	10
Figure 9: Monthly Variation of PM <sub>2.5</sub> .....	10
Figure 10: Diurnal variation of PM <sub>2.5</sub> .....	11
Figure 11: Compliance status of PM <sub>2.5</sub> .....	11
Figure 12: Histogram for the ambient concentration of PM <sub>10</sub> . .....	12
Figure 13: Daily average of PM <sub>10</sub> .....	12
Figure 14: Monthly average of Pm <sub>10</sub> .....	13
Figure 15: Monthly Variation of PM <sub>10</sub> .....	13
Figure 16: Diurnal variation of PM <sub>10</sub> concentration .....	14
Figure 17: Compliance status of PM <sub>10</sub> .....	14
Figure 18: Histogram for the ambient concentration of TSP .....	15
Figure 19: Daily average of TSP .....	15
Figure 20: Monthly Average of TSP .....	16
Figure 21: Monthly Variation of TSP .....	16
Figure 22: Diurnal Variation of TSP .....	17
Figure 23: Compliance status of TSP .....	17
Figure 24: Annual average of Pm <sub>1</sub> , PM <sub>2.5</sub> , PM <sub>10</sub> and TSP in 2020 .....	18
Figure 26 : Histogram of PM <sub>1</sub> .....	18
Figure 27: Daily average of PM <sub>1</sub> .....	19
Figure 28: Monthly Average of PM <sub>1</sub> .....	19

Figure 29: Monthly Variation of PM <sub>1</sub> .....	20
Figure 30: Seasonal variation of PM <sub>1</sub> .....	20
Figure 31: Diurnal variation of PM <sub>1</sub> .....	21
Figure 32 : Histogram of PM <sub>2.5</sub> .....	21
Figure 33: Daily average of PM <sub>2.5</sub> .....	22
Figure 34: Monthly Average of PM <sub>2.5</sub> .....	22
Figure 35: Monthly Variation of PM <sub>2.5</sub> .....	23
Figure 36: Seasonal variation of PM <sub>2.5</sub> .....	23
Figure 37: Diurnal variation of PM <sub>2.5</sub> .....	24
Figure 38: Compliance status of PM <sub>2.5</sub> .....	24
Figure 39 : Histogram for the ambient concentration of PM <sub>10</sub> .....	25
Figure 40: Daily average of PM <sub>10</sub> .....	25
Figure 41: Monthly average of Pm <sub>10</sub> .....	26
Figure 42: Monthly Variation of PM <sub>10</sub> .....	26
Figure 43: Seasonal variation of PM <sub>10</sub> .....	27
Figure 44: Diurnal variation of PM <sub>10</sub> concentration.....	27
Figure 45: Compliance status of PM <sub>10</sub> .....	28
Figure 46 : Histogram for the ambient concentration of TSP.....	28
Figure 47: Daily average of TSP.....	29
Figure 48: Monthly Average of TSP.....	29
Figure 49: Monthly Variation of TSP.....	30
Figure 50: Seasonal variation of TSP.....	30
Figure 51: Diurnal Variation of TSP.....	31

## Annex

# 1 Dhankuta Air Quality Monitoring Station

## 1. About the Station

- Address : Dhankuta Municipality Office
- Location: 26.98066 latitude, 87.34392 longitude
- Surrounding of the station
  2. East: Adaalat Road
  3. West: Adaalat Road
  4. North: Adaalat Road
  5. South: Municipality Office
- Establish year: 2020 (2077)
- Brief introduction of the instruments installed in the station (should include- brief specification; number of instrument)
  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 Dhankuta station (2019-2020)

### 2.1 Air quality status, 2019

#### 2.1.1 Temporal variation of PM<sub>1</sub>

##### **Annual average of PM<sub>1</sub>**

The annual average of PM<sub>1</sub> at Dhankuta station was found to be 26.66  $\mu\text{g}/\text{m}^3$ . Histogram of hourly average PM<sub>1</sub> is shown in the figure below.

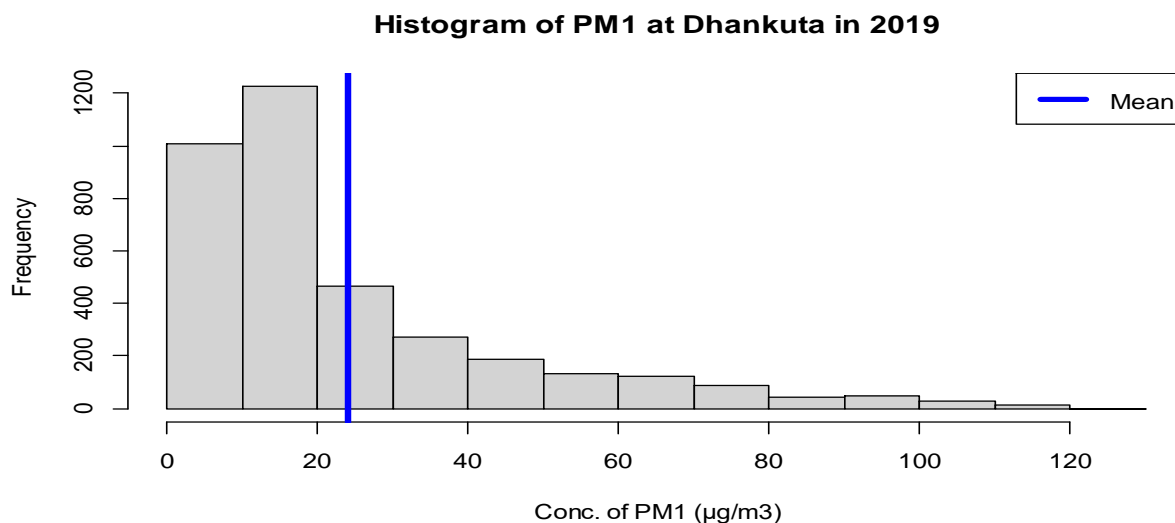


Figure 1: Histogram of PM<sub>1</sub>

### Daily average of PM<sub>1</sub>:

Daily average concentration of PM<sub>1</sub> was high during November and was found low during August .

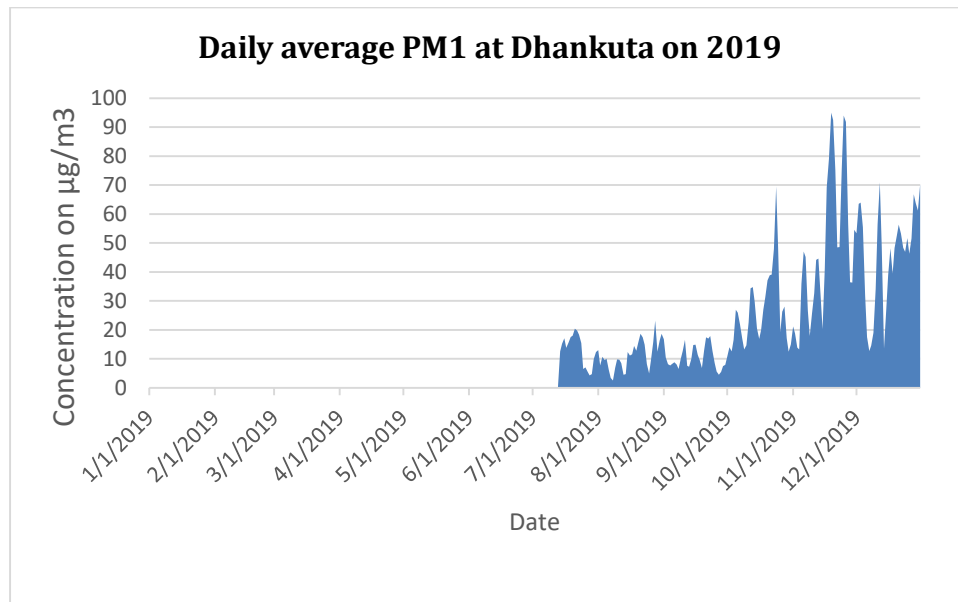


Figure 2: Daily average of PM<sub>1</sub>

### Monthly average of PM<sub>1</sub>

The highest and the lowest monthly average of PM<sub>1</sub> was found during November (47.67 µg/m<sup>3</sup>) and September (10.43 µg/m<sup>3</sup>) respectively (**Error! Reference source not found.**).

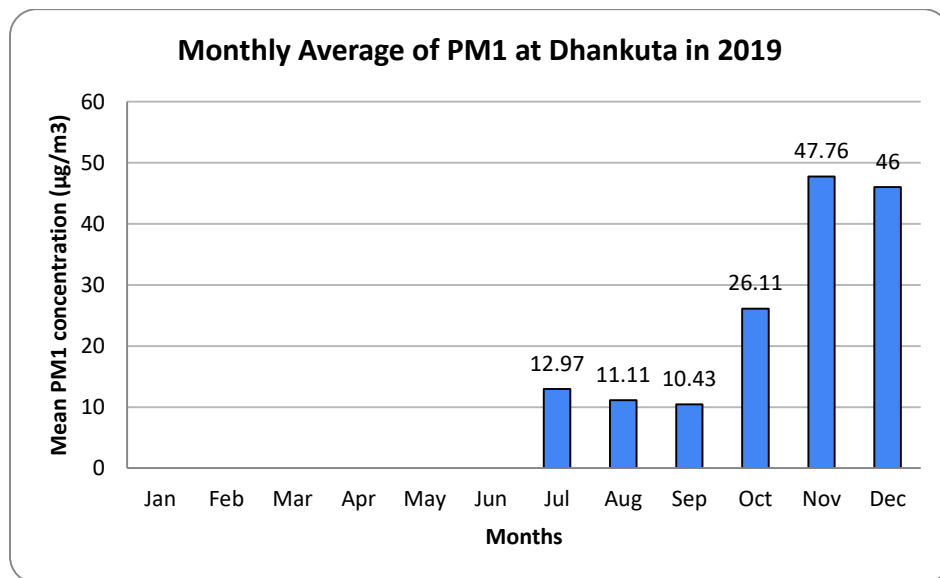


Figure 3: Monthly Average of PM<sub>1</sub>

### Monthly variation of PM<sub>1</sub>

Variation in concentration of PM<sub>1</sub> was found more during November whereas low during September (**Error! Reference source not found.**).

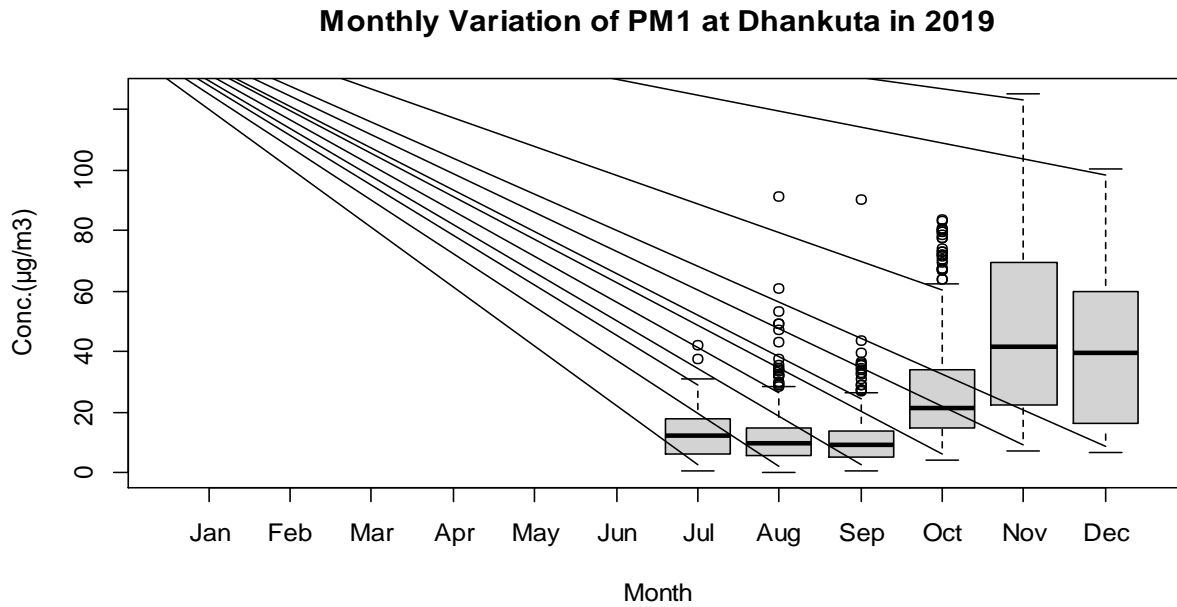


Figure 4: Monthly Variation of PM<sub>1</sub>

### Diurnal variation of average PM<sub>1</sub> concentration

The diurnal variation of average PM<sub>1</sub> concentrations can be shown in the **Error! Reference source not found.** below. The variation in PM<sub>1</sub> concentration was low at 08-10am.

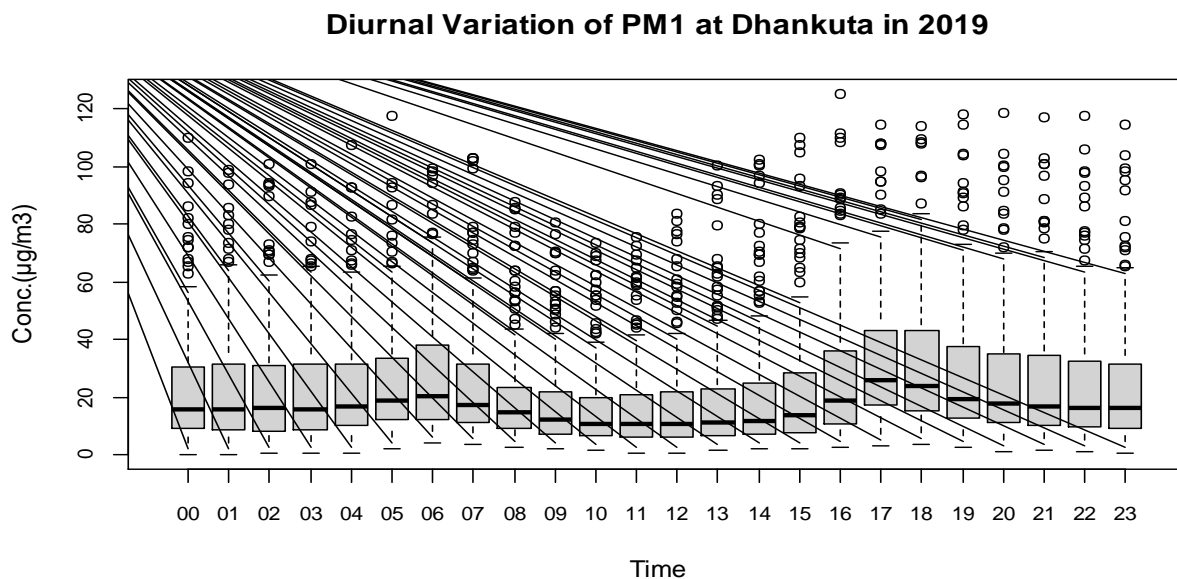


Figure 5: Monthly Variation of PM<sub>1</sub>



## 2.1.2 Temporal Variation of PM<sub>2.5</sub>

### Annual average of PM<sub>2.5</sub>

Histogram of hourly average PM<sub>2.5</sub> is shown in the figure below (**Error! Reference source not found.**).

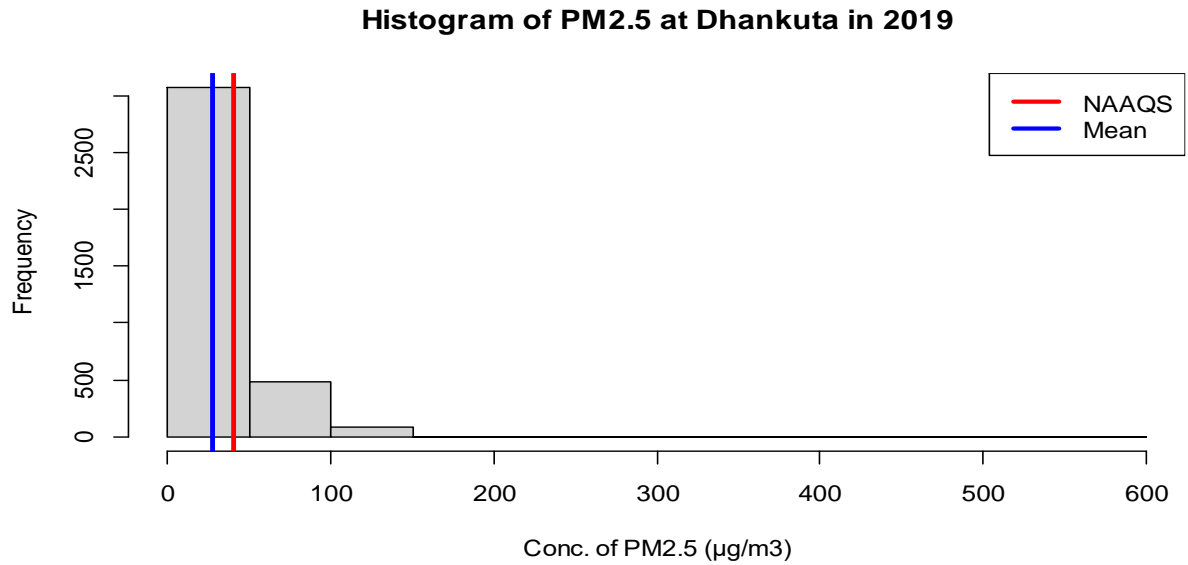


Figure 6: Histogram of PM<sub>2.5</sub>.

### Daily average of PM<sub>2.5</sub>

Daily average concentration of PM<sub>2.5</sub> was high during Dhankuta and December low during August (**Error! Reference source not found.**).

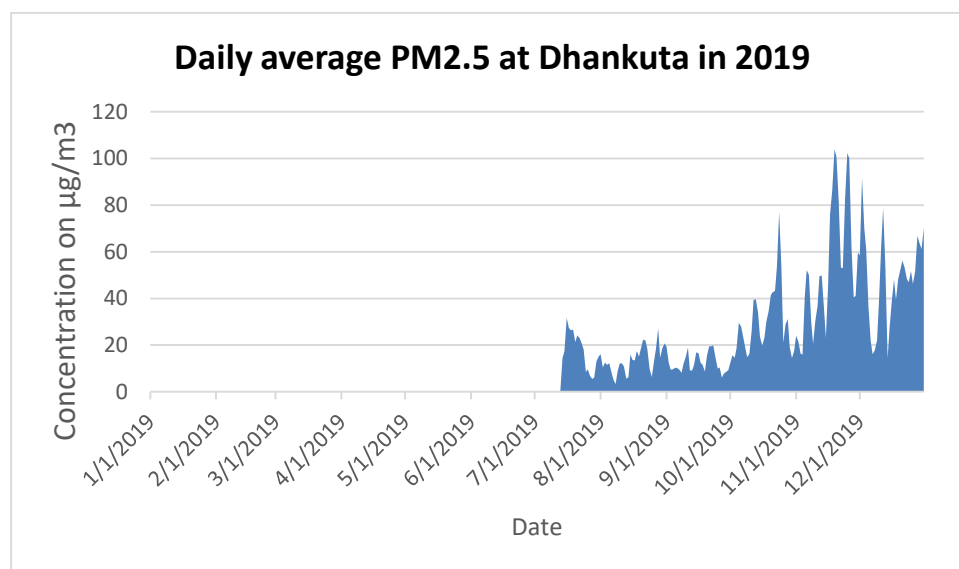


Figure 7: Daily average of PM<sub>2.5</sub>

### Monthly average of PM<sub>2.5</sub>

The highest and the lowest monthly average of PM<sub>2.5</sub> was found during December (52.88  $\mu\text{g}/\text{m}^3$ ) and September (12.38  $\mu\text{g}/\text{m}^3$ ) respectively.

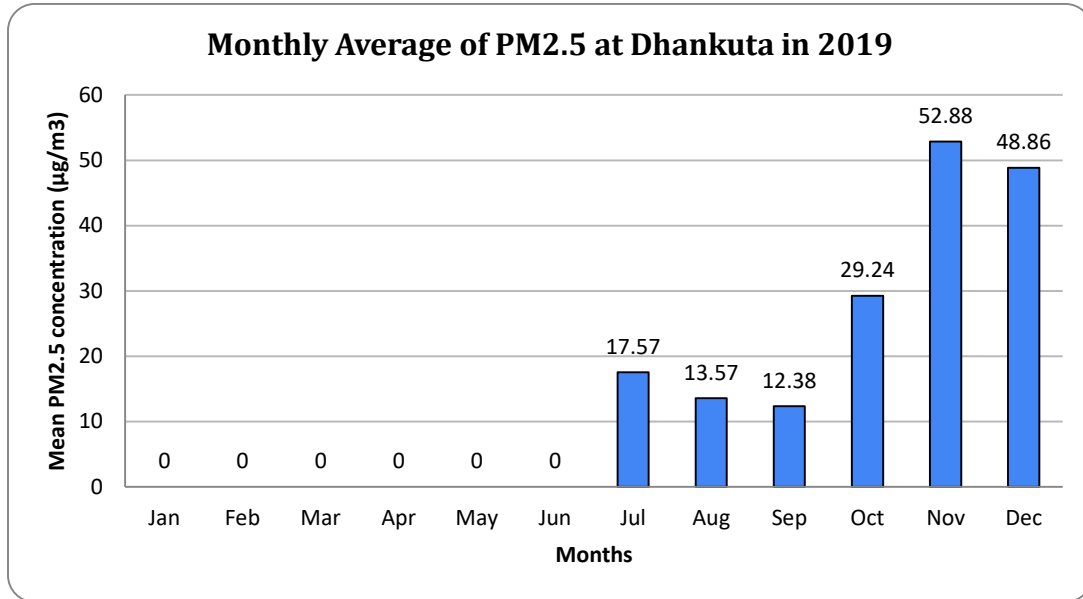


Figure 8: Monthly Average of PM<sub>2.5</sub>

### Monthly variation of PM<sub>2.5</sub>

Variation in concentration of PM<sub>2.5</sub> was found more during November and December whereas low during September.

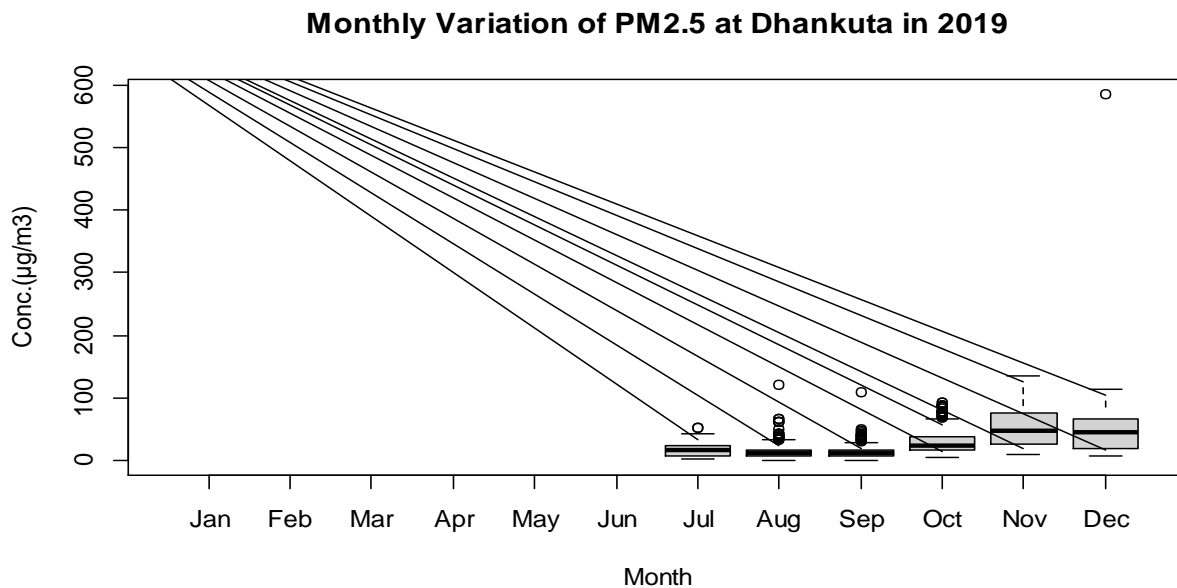


Figure 9: Monthly Variation of PM<sub>2.5</sub>

### Diurnal variation of average PM<sub>2.5</sub> concentration

The diurnal variation of average PM<sub>2.5</sub> concentrations can be shown in the **Error! Reference source not found.** below. The variation in PM<sub>2.5</sub> concentration was high at around 6 pm and low at 8 to 10 am.

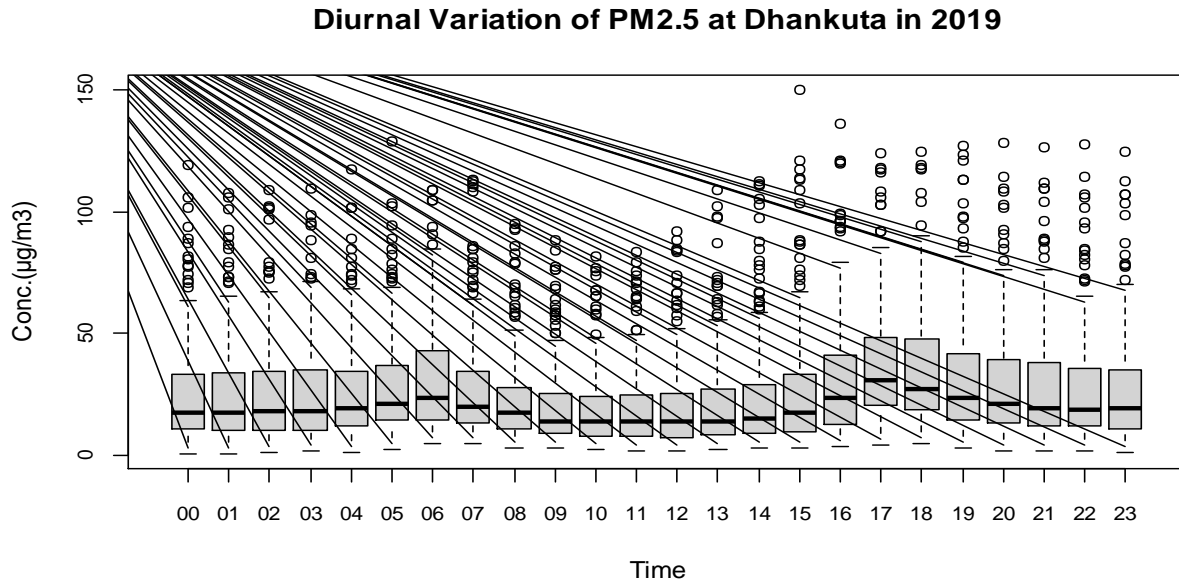


Figure 10: Diurnal variation of PM<sub>2.5</sub>

### Compliance status of PM<sub>2.5</sub>

The total days of PM<sub>2.5</sub> monitored in the year 2019 counts 171, of which 47 days exceed the NAAQS guideline as shown in figure below.

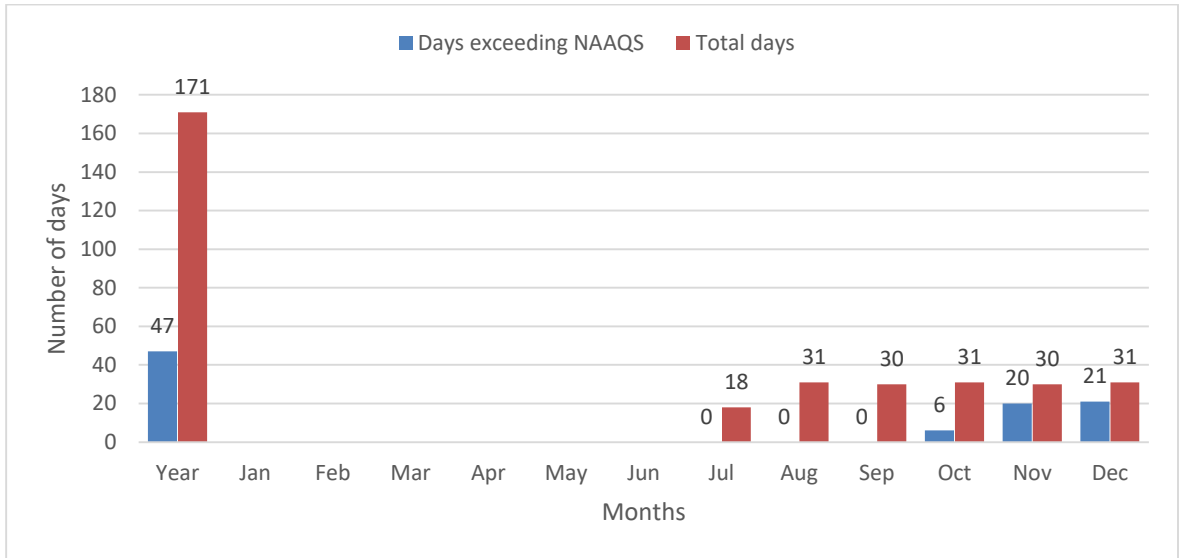


Figure 11: Compliance status of PM<sub>2.5</sub>

### 2.1.3 Temporal variation of PM<sub>10</sub>

#### Annual average of PM<sub>10</sub>

Histogram of hourly average PM<sub>10</sub> is shown in the figure below.

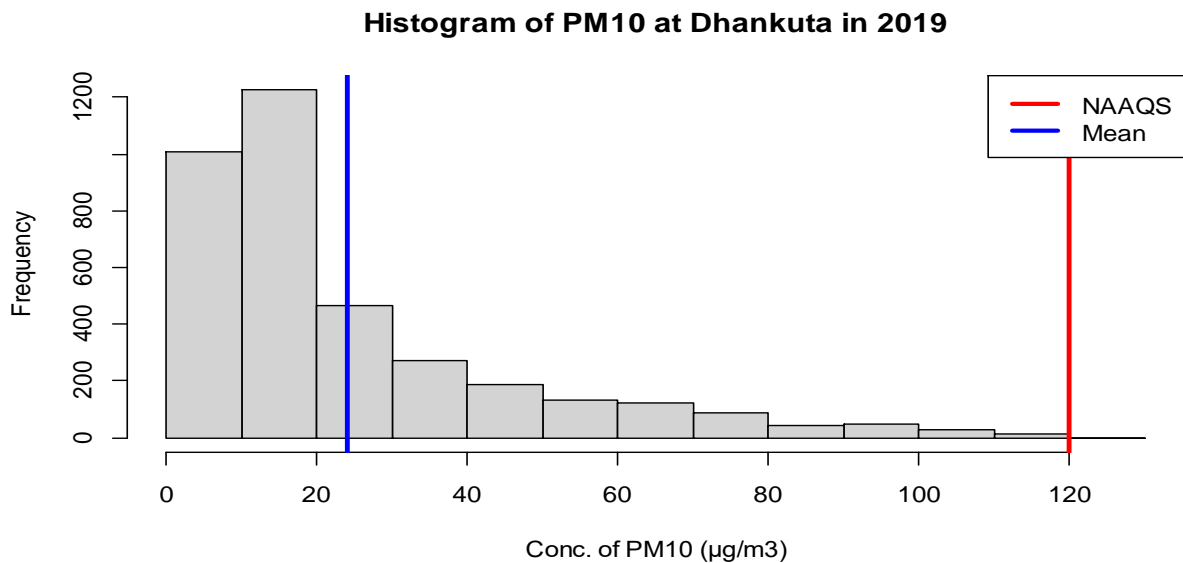


Figure 12: Histogram for the ambient concentration of PM<sub>10</sub>.

#### Daily average of PM<sub>10</sub>:

Daily average concentration of PM<sub>10</sub> was high during November and December and was found low during August and September as shown in figure below.

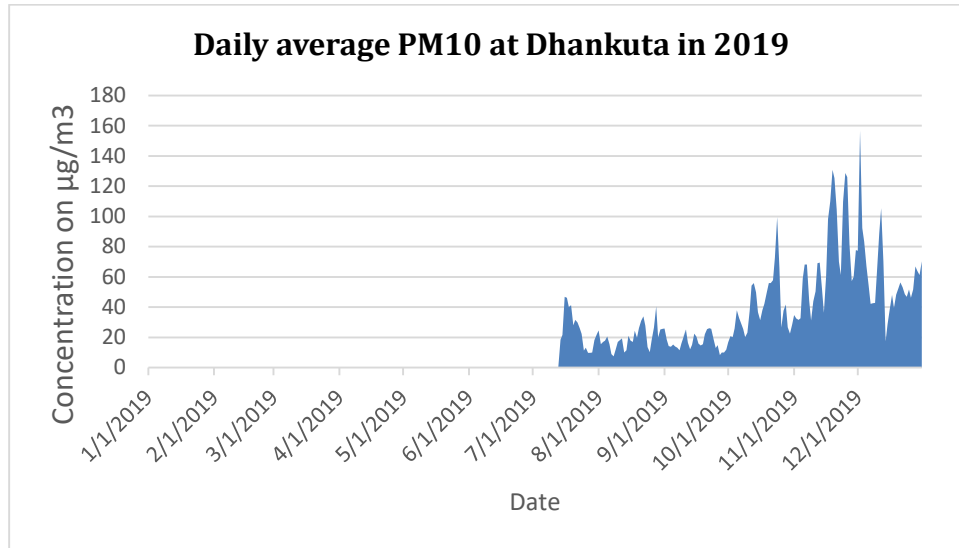


Figure 13: Daily average of PM<sub>10</sub>

### Monthly average of PM<sub>10</sub>

The highest and the lowest monthly average of PM<sub>2.5</sub> was found during November (70.8 µg/m<sup>3</sup>) and September (16.86 µg/m<sup>3</sup>) respectively as shown in figure below.

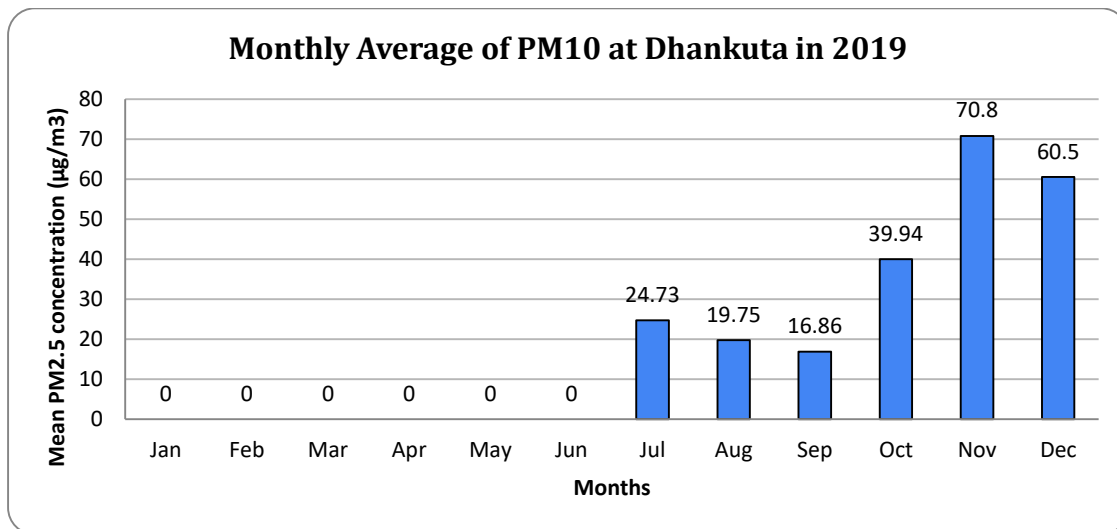


Figure 14: Monthly average of Pm<sub>10</sub>

### Monthly variation of PM<sub>10</sub>

Variation in concentration of PM<sub>10</sub> was found more during November and low during September. (Error! Reference source not found.).

### Monthly Variation of PM<sub>10</sub> at Dhankuta in 2019

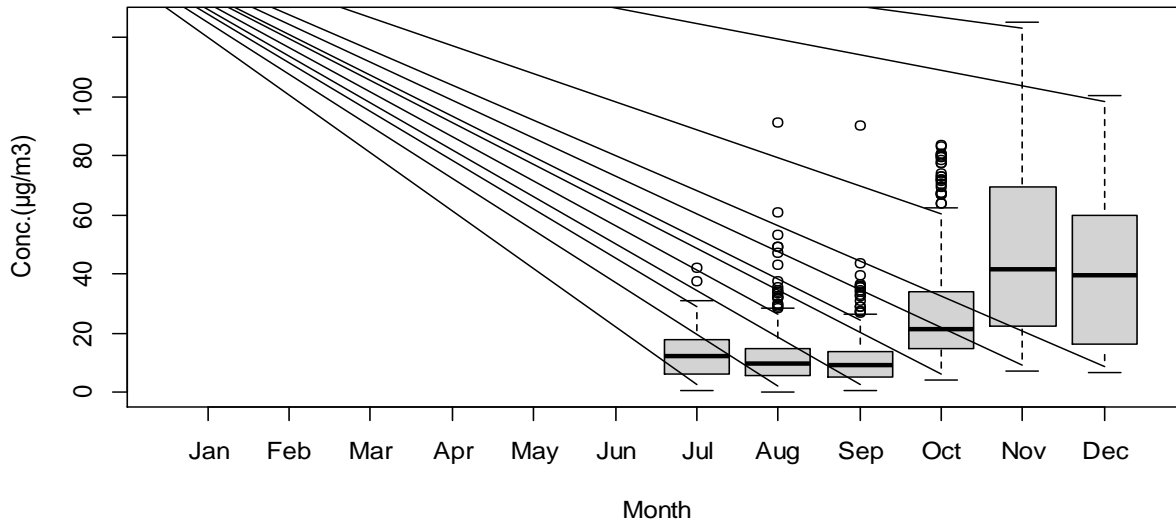


Figure 15: Monthly Variation of PM<sub>10</sub>

### Diurnal variation of average PM<sub>10</sub> concentration

The diurnal variation of average PM<sub>10</sub> concentrations can be shown in the **Error! Reference source not found.** below. The variation in PM<sub>10</sub> concentration was low at 8 to 10 am.

### Diurnal Variation of PM<sub>10</sub> at Dhankuta in 2019

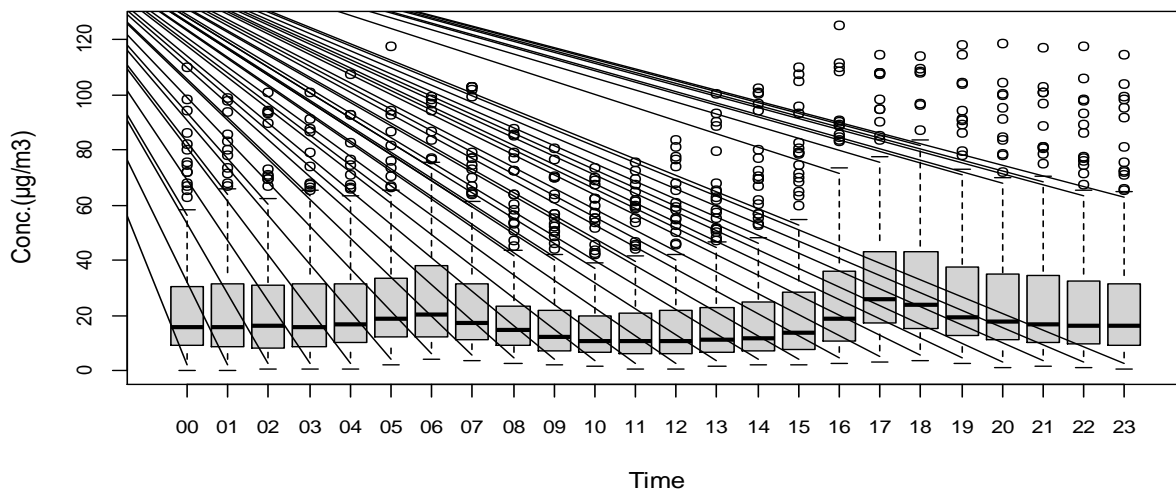


Figure 16: Diurnal variation of PM<sub>10</sub> concentration

### Compliance status of PM<sub>10</sub>

The total days of PM<sub>10</sub> monitored in the year 2019 counts 171, of which 5 days exceed the NAAQS guideline **Error! Reference source not found.**

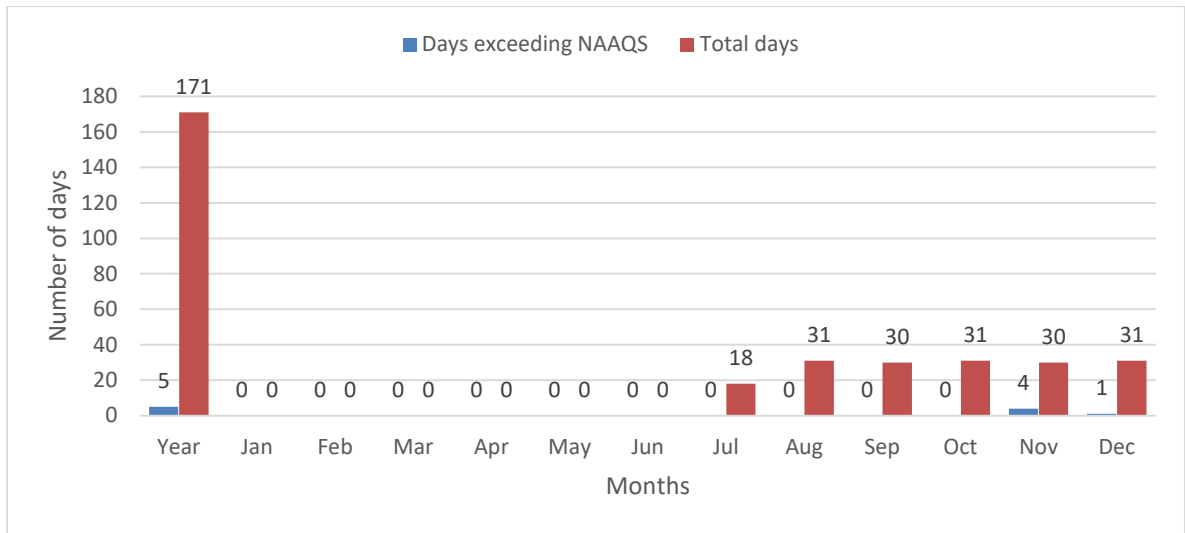


Figure 17: Compliance status of PM<sub>10</sub>

#### 2.1.4 Temporal Variation of TSP

##### Annual average of TSP

Histogram of hourly average TSP is shown in the figure below (**Error! Reference source not found.**).

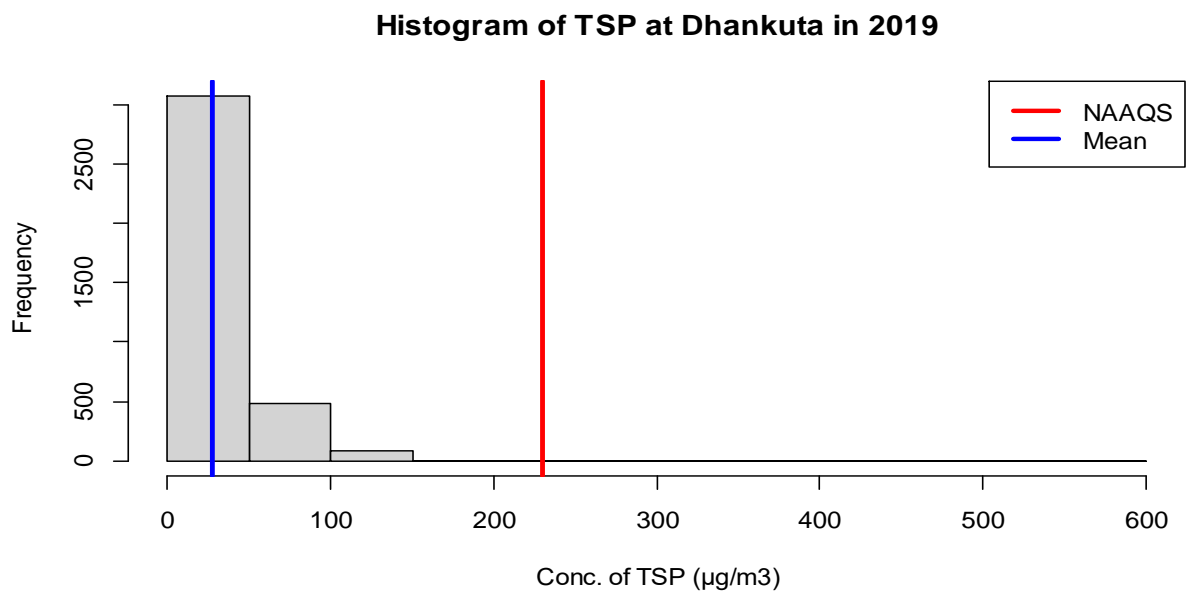


Figure 18: Histogram for the ambient concentration of TSP

### Daily average of TSP:

Daily average concentration of TSP was high during November was found low during August and September. (**Error! Reference source not found.**)

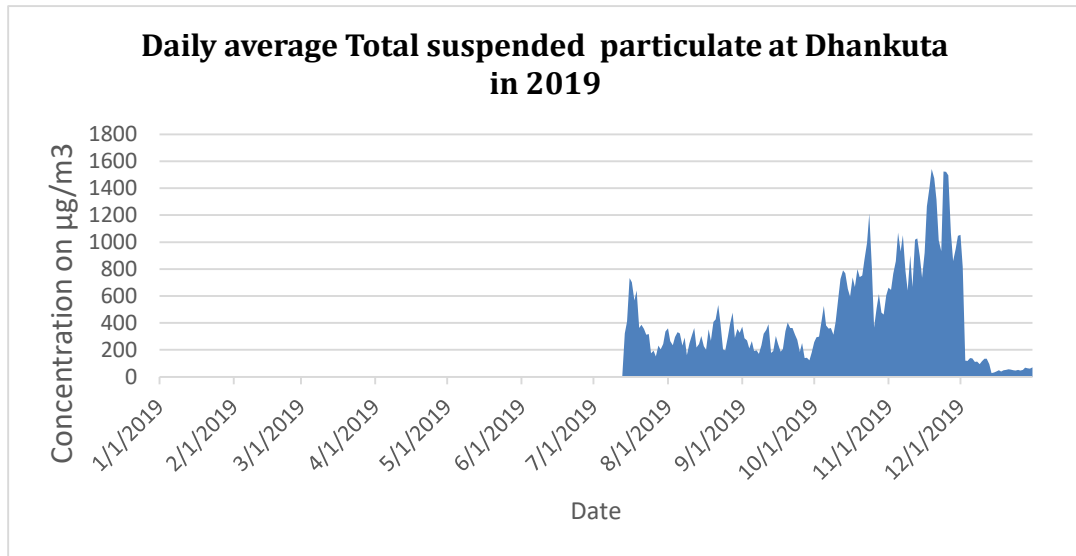


Figure 19: Daily average of TSP

### Monthly average of TSP

The highest and the lowest monthly average of TSP was found during November ( $1033 \mu\text{g}/\text{m}^3$ ) and december ( $131.51 \mu\text{g}/\text{m}^3$ ) respectively (**Error! Reference source not found.**)

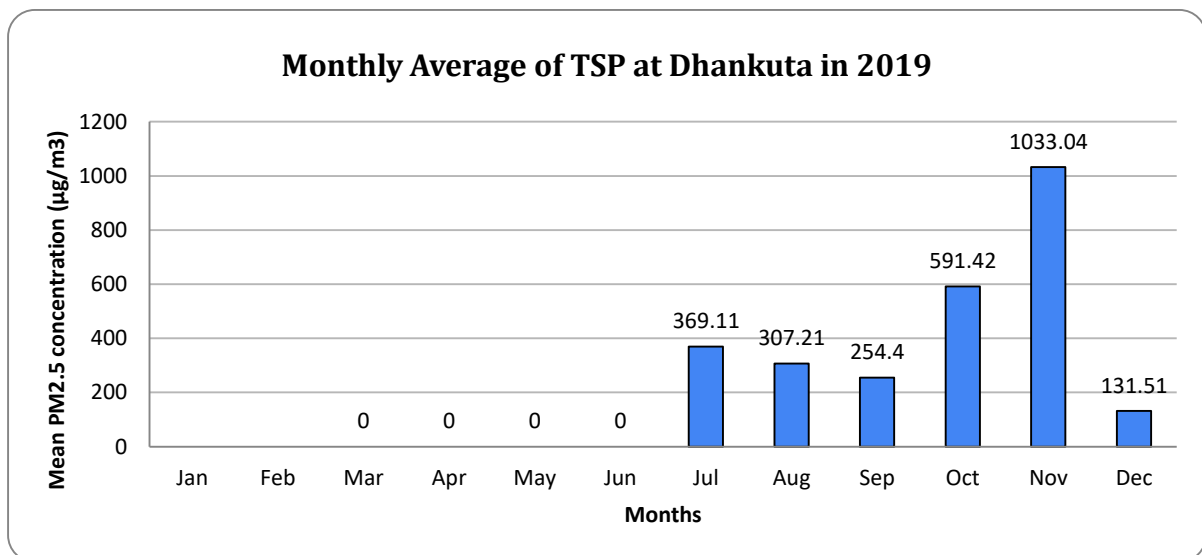


Figure 20: Monthly Average of TSP

### Monthly variation of TSP



Variation in concentration of TSP was found more during November and low during September

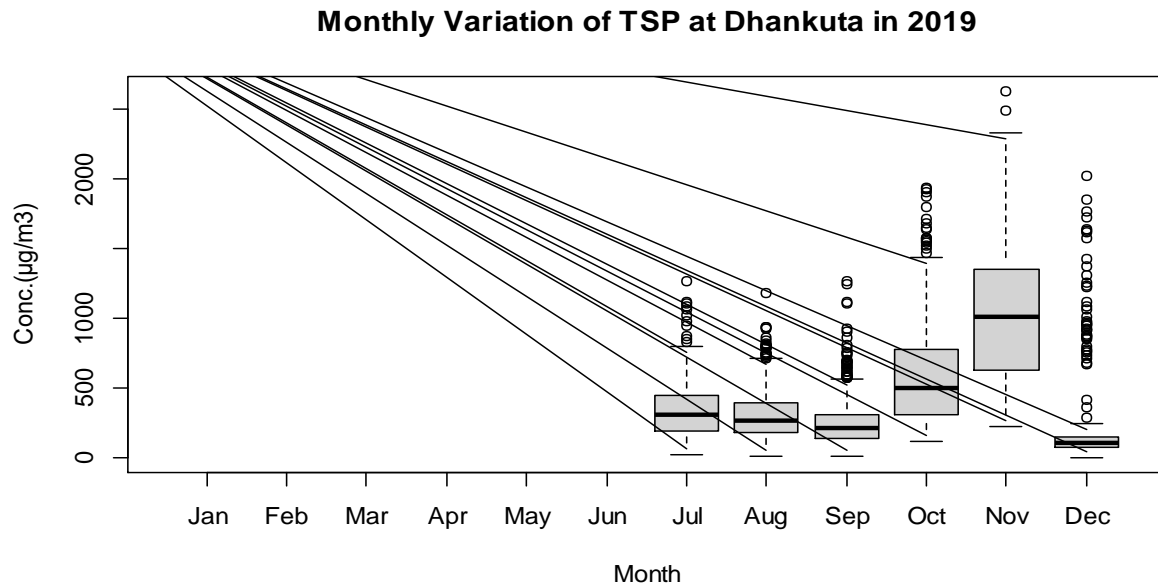


Figure 21: Monthly Variation of TSP

### Diurnal variation of average TSP concentration

The diurnal variation of average TSP concentrations can be shown in the **Error! Reference source not found.** below. The variation in TSP concentration was high at around 12 am and low at 2 to 3 am.

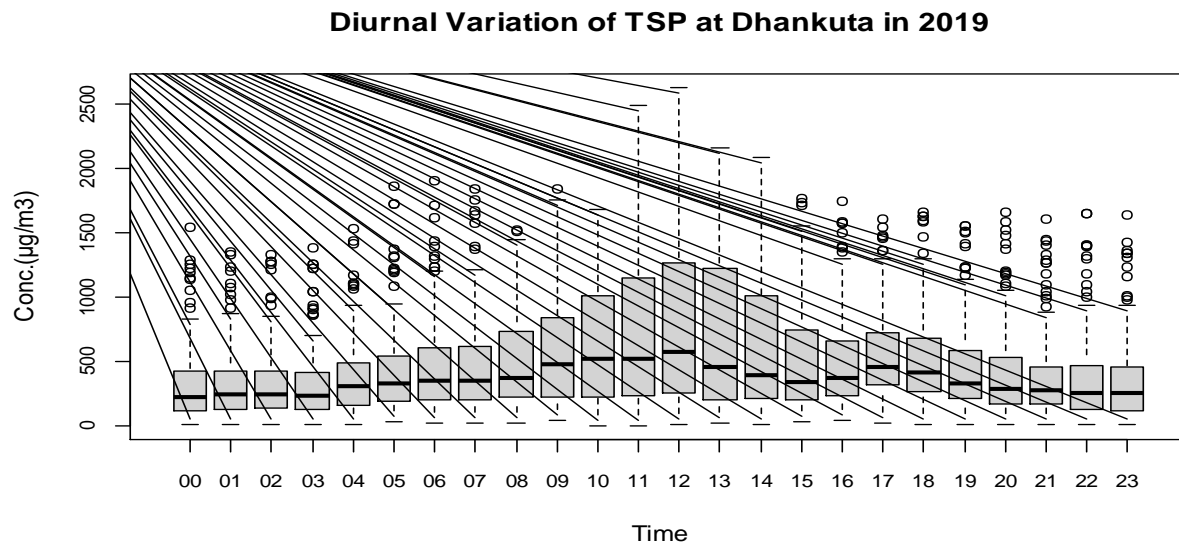


Figure 22: Diurnal Variation of TSP

## Compliance status of TSP

The total days of PM<sub>2.5</sub> monitored in the year 2019 counts 171, of which 119 days exceed the NAAQS guideline as shown in figure below.

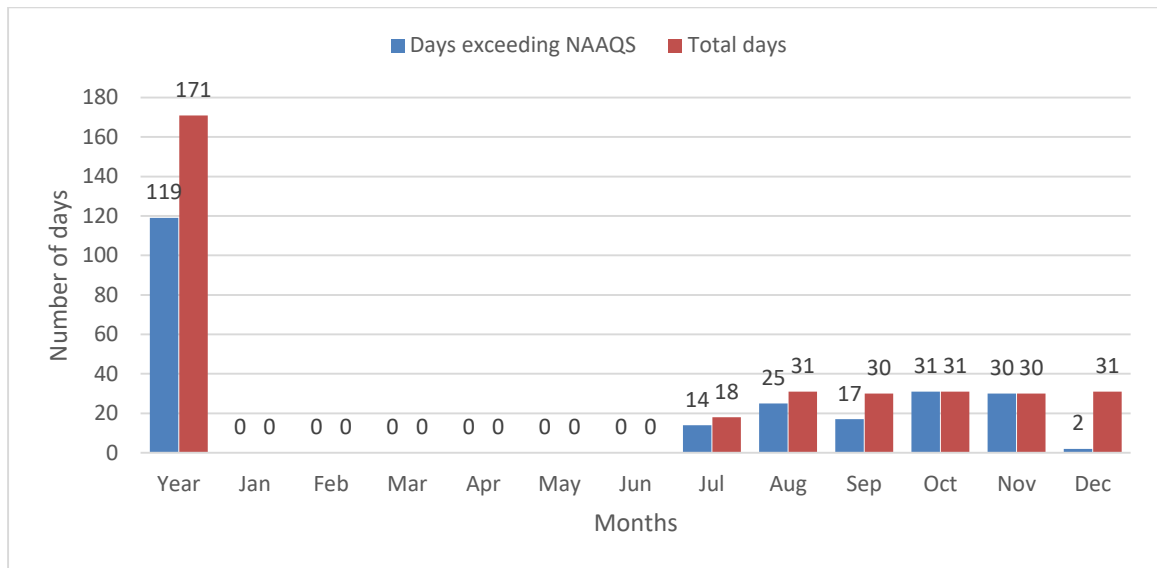


Figure 23: Compliance status of TSP

## 2.2 Air Quality Status, 2020

### 2.2.1 Annual average of PM<sub>1</sub>, PM<sub>2.5</sub>, PM<sub>10</sub> and TSP

The annual average of PM<sub>1</sub>, PM<sub>2.5</sub>, PM<sub>10</sub> and TSP of the Dhankuta monitoring station was calculated as shown in figure below.

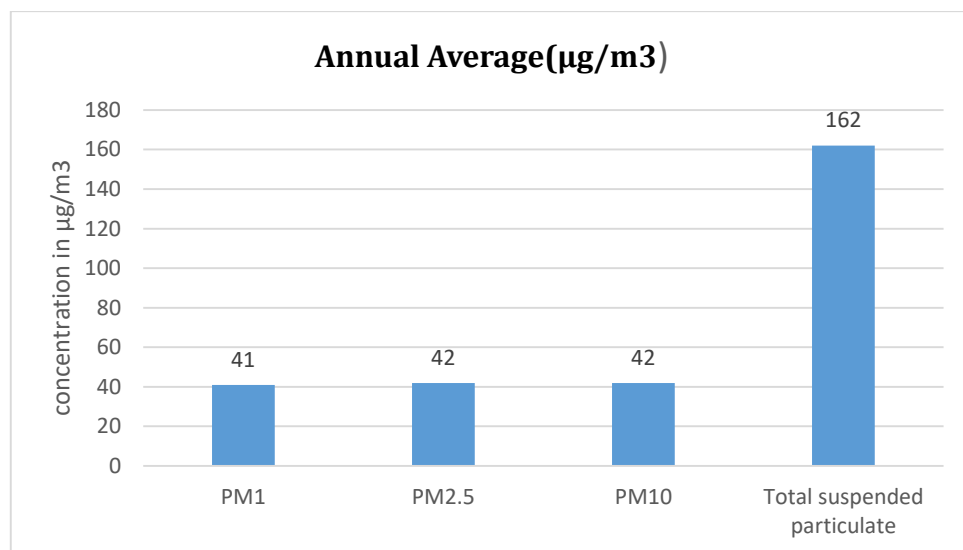


Figure 24: Annual average of Pm<sub>1</sub>, PM<sub>2.5</sub>, PM<sub>10</sub> and TSP in 2020

## Annual average of PM<sub>1</sub>

The annual average of PM<sub>1</sub> at Dhankuta station was found to be 29.2 µg/m<sup>3</sup>. Histogram of hourly average PM<sub>1</sub> is shown in the figure below.

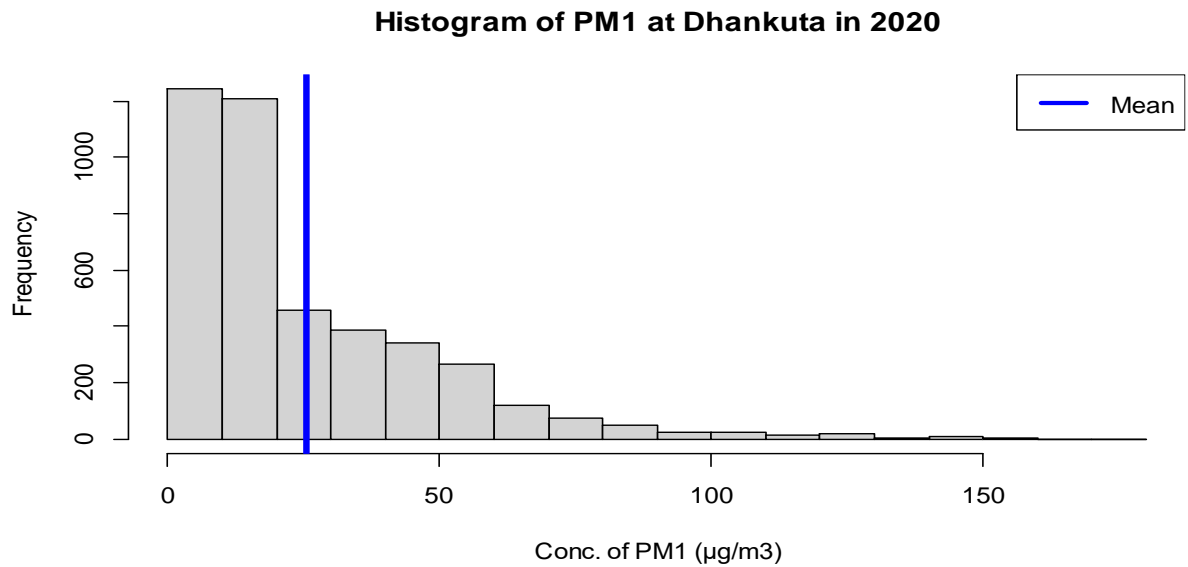


Figure 25 : Histogram of PM<sub>1</sub>

**Daily average of PM<sub>1</sub>:**

Daily average concentration of PM<sub>1</sub> was high during October and December and was found low during July, August as shown in figure below

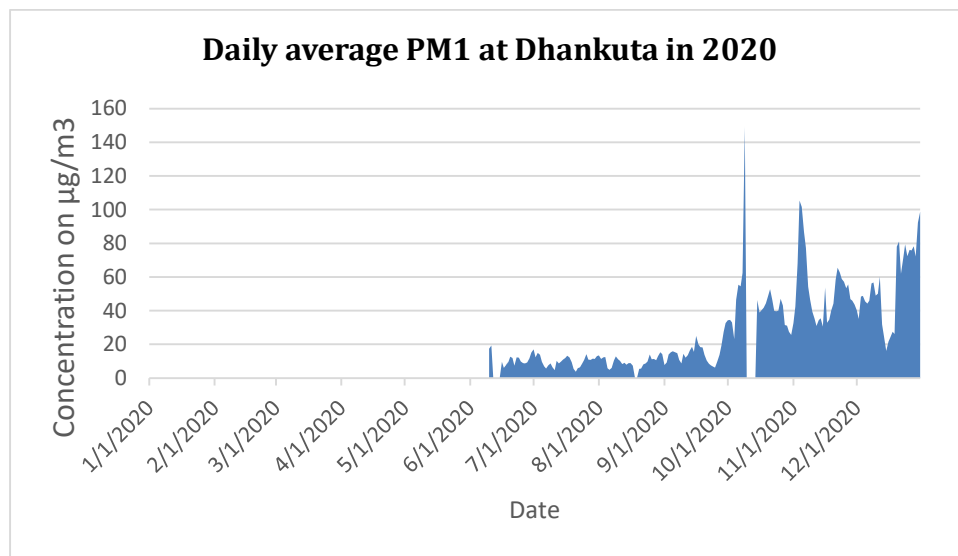


Figure 26: Daily average of PM<sub>1</sub>

**Monthly average of PM<sub>1</sub>**

The highest and the lowest monthly average of PM<sub>1</sub> was found during December (90.53 µg/m<sup>3</sup>) and June (6.7 µg/m<sup>3</sup>) respectively.

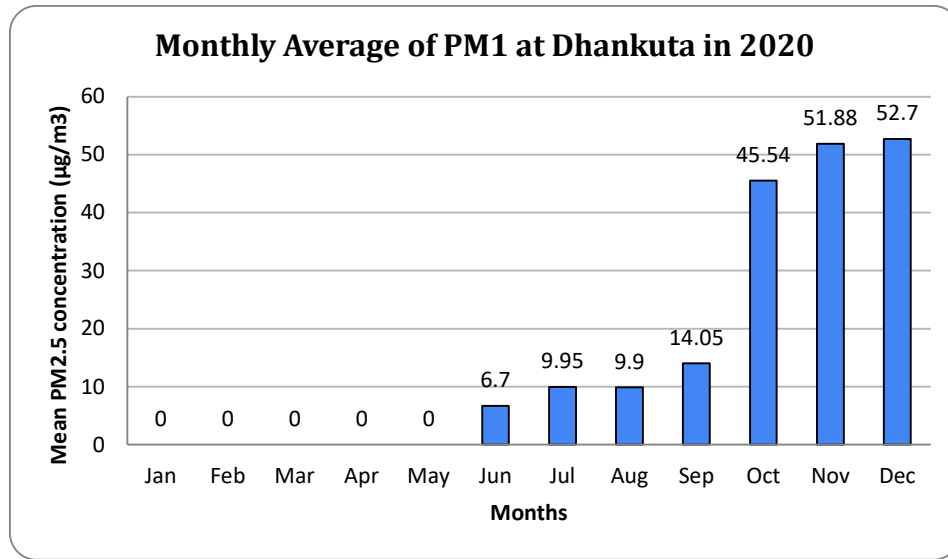


Figure 27: Monthly Average of PM<sub>1</sub>

### Monthly variation of PM<sub>1</sub>

Variation in concentration of PM<sub>1</sub> was found more during November whereas low during June, July.

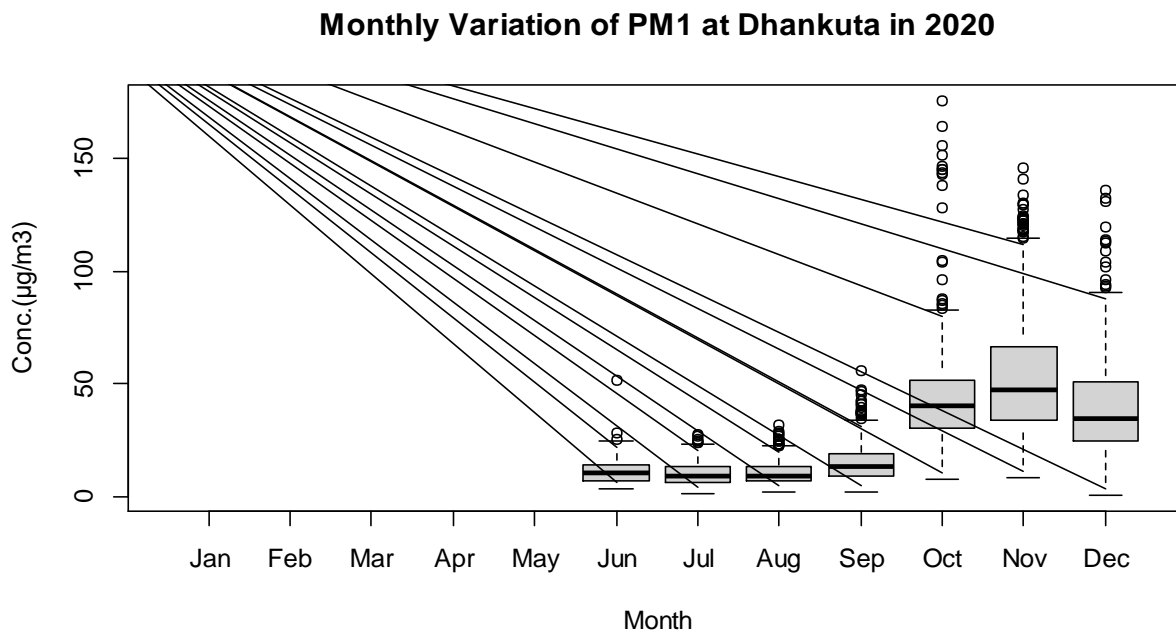


Figure 28: Monthly Variation of PM<sub>1</sub>

### Seasonal variation of average PM<sub>1</sub> concentration

Ambient concentration of average PM<sub>1</sub> during monsoon (June-September), and post-monsoon (October-November) can be shown in the **Error! Reference source not found.** below. The concentration of PM<sub>1</sub> was found higher during post monsoon (37.15 µg/m<sup>3</sup>) than monsoon season (8.85 µg/m<sup>3</sup>).

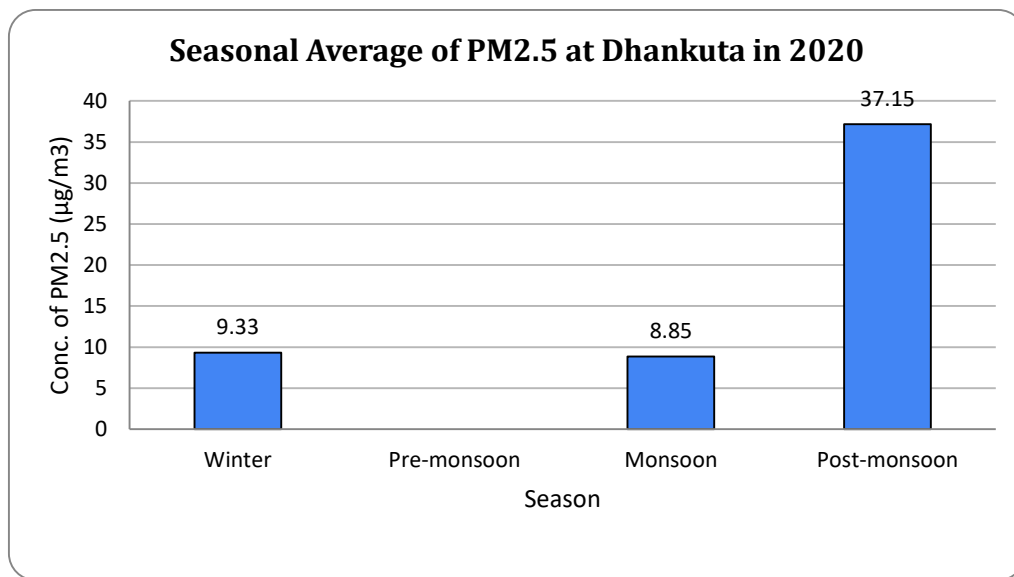


Figure 29: Seasonal variation of PM<sub>1</sub>

### Diurnal variation of average PM<sub>1</sub> concentration

The diurnal variation of average PM<sub>1</sub> concentrations can be shown in the **Error! Reference source not found.** below. The variation in PM<sub>1</sub> concentration was high at around 5 pm and low at 12 to 2 pm.

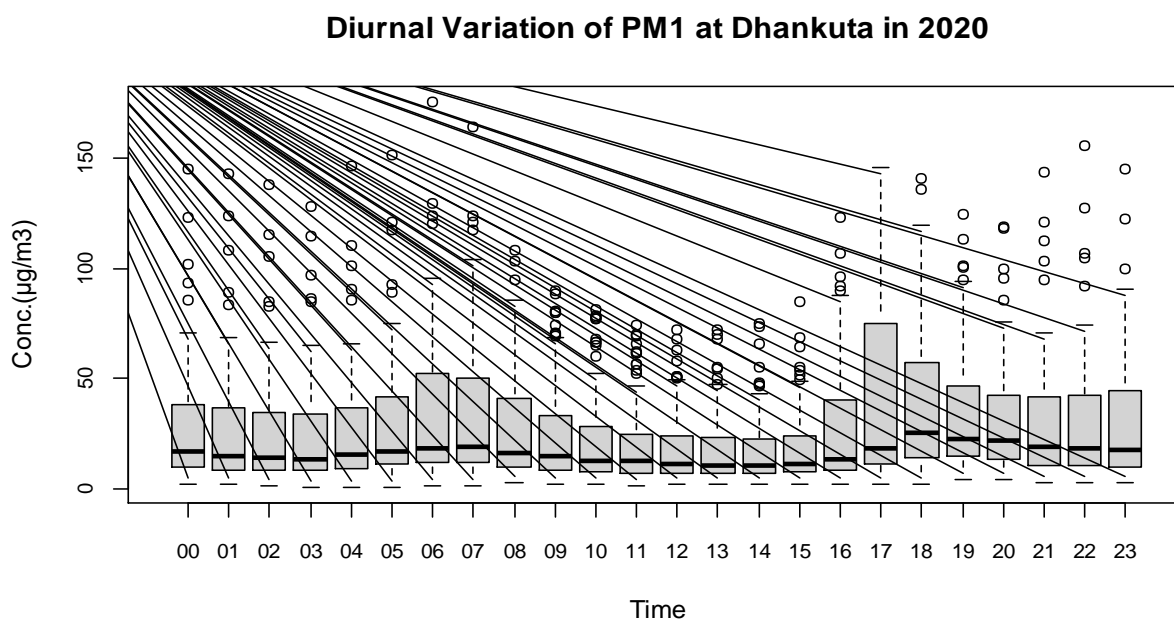


Figure 30: Diurnal variation of PM<sub>1</sub>

## 2.2.2 Temporal Variation of PM2.5

### Annual average of PM2.5

The annual average of PM2.5 at Dhankuta station was found to be 42  $\mu\text{g}/\text{m}^3$ . Histogram of hourly average PM2.5 is shown in the figure below (**Error! Reference source not found.**).

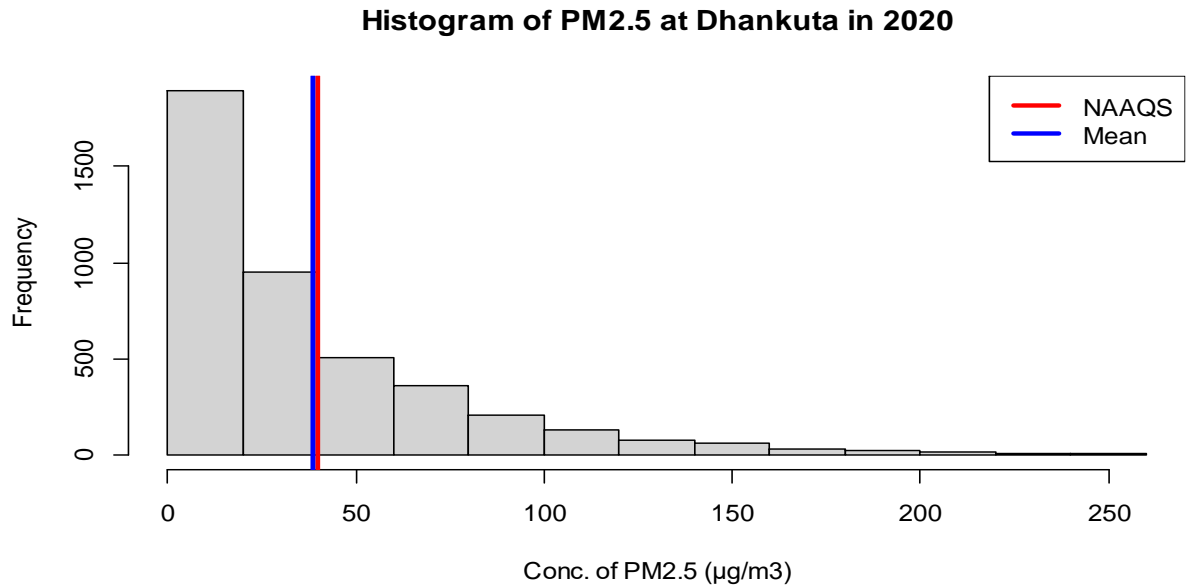


Figure 31 : Histogram of PM2.5.

### Daily average of PM2.5:

Daily average concentration of PM2.5 was high during October and was found low during July, August

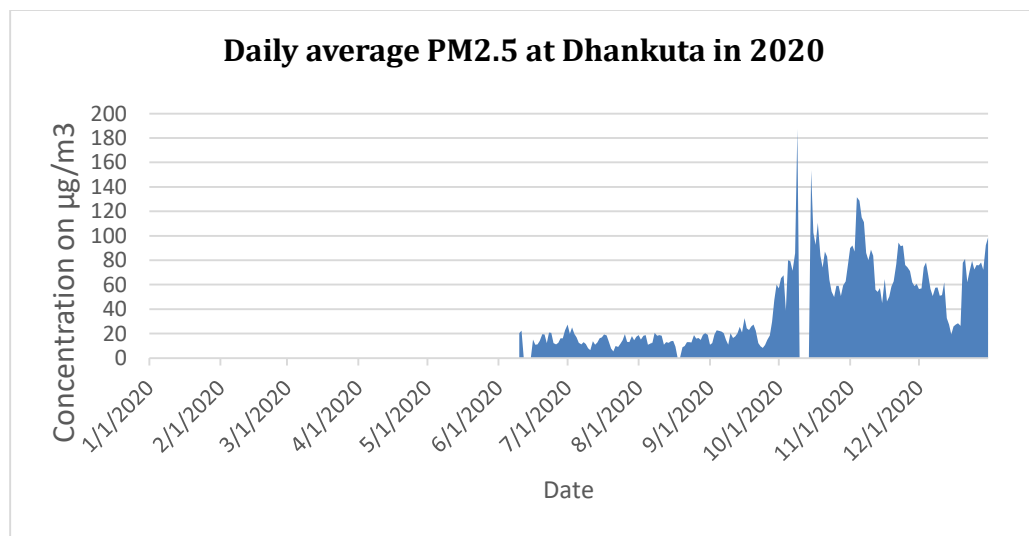


Figure 32: Daily average of PM2.5

### Monthly average of PM2.5

The highest and the lowest monthly average of PM<sub>2.5</sub> was found during November (78.7 µg/m<sup>3</sup>) and June (9.75 µg/m<sup>3</sup>) respectively (**Error! Reference source not found.**).

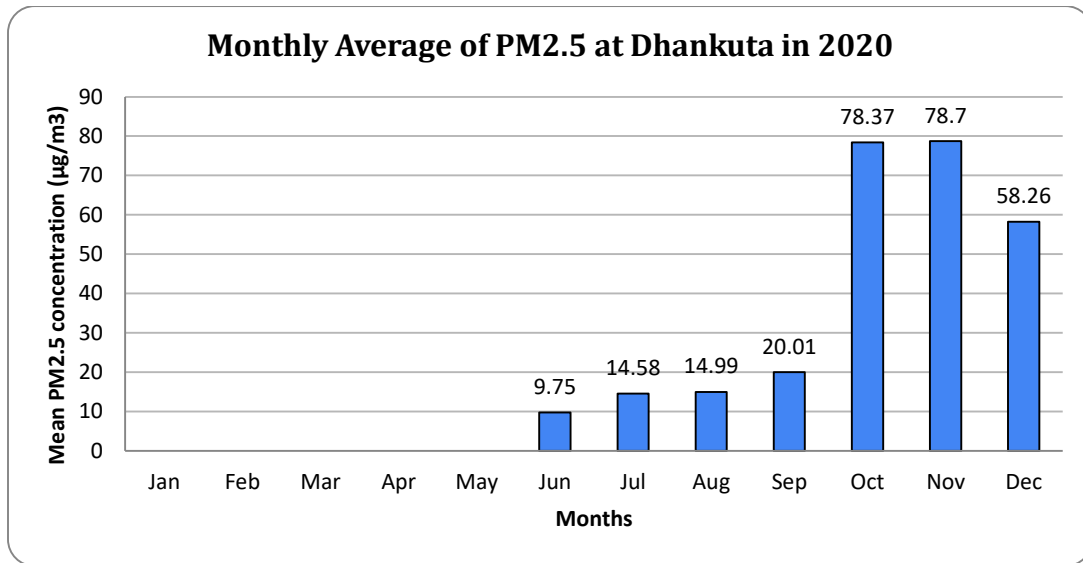


Figure 33: Monthly Average of PM<sub>2.5</sub>

### Monthly variation of PM<sub>2.5</sub>

Variation in concentration of PM<sub>2.5</sub> was found more during November whereas low during June, July.

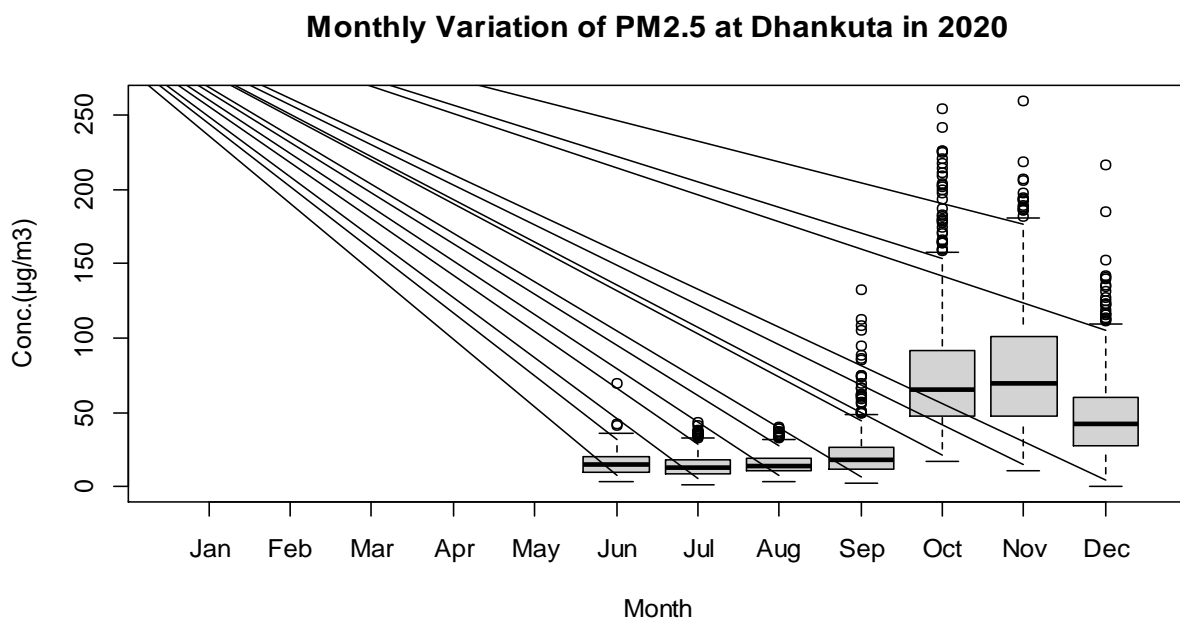


Figure 34: Monthly Variation of PM<sub>2.5</sub>

### Seasonal variation of average PM<sub>2.5</sub> concentration

Ambient concentration of average PM<sub>2.5</sub> during monsoon (June-September), and post-monsoon (October-November) can be shown in the **Error! Reference source not found.** below. The concentration of PM<sub>2.5</sub> was found higher during post monsoon (59 µg/m<sup>3</sup>) than monsoon season (13 µg/m<sup>3</sup>).

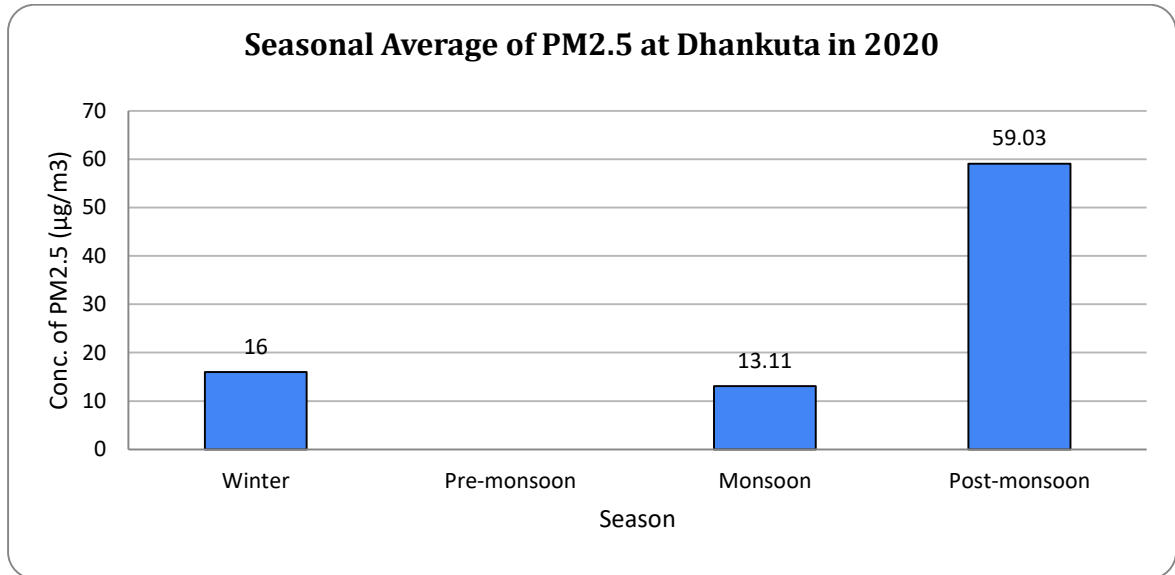


Figure 35: Seasonal variation of PM<sub>2.5</sub>

### Diurnal variation of average PM<sub>2.5</sub> concentration

The diurnal variation of average PM<sub>2.5</sub> concentrations can be shown in the **Error! Reference source not found.** below. The variation in PM<sub>2.5</sub> concentration was high at around 5 pm and low at 12 to 2 pm.

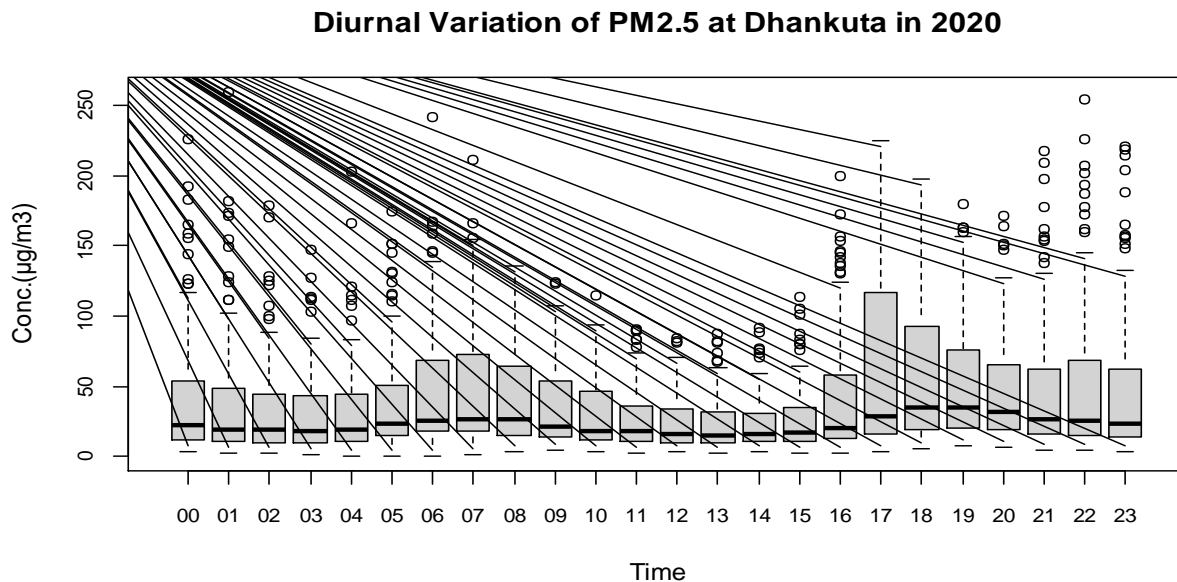




Figure 36: Diurnal variation of PM<sub>2.5</sub>

### Compliance status of PM<sub>2.5</sub>

The total days of PM<sub>2.5</sub> monitored in the year 2020 counts 192, of which 79 days exceed the NAAQS guideline as shown in figure below.

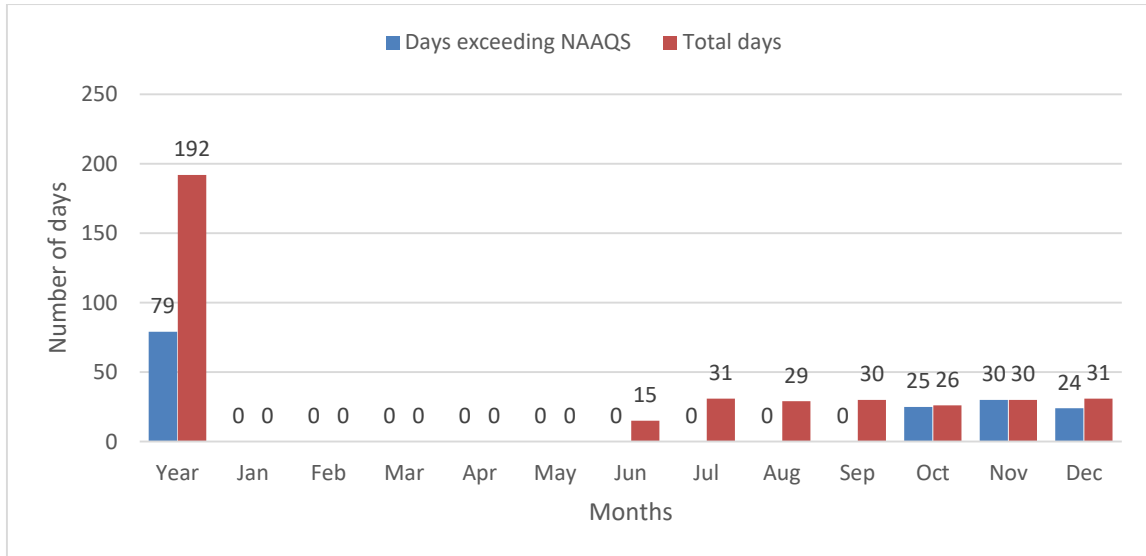


Figure 37: Compliance status of PM<sub>2.5</sub>

### 2.2.3 Temporal variation of PM10

#### Annual average of PM10

The annual average of PM10 at Dhankuta station was found to be 71  $\mu\text{g}/\text{m}^3$ . Histogram of hourly average PM10 is shown in the figure below.

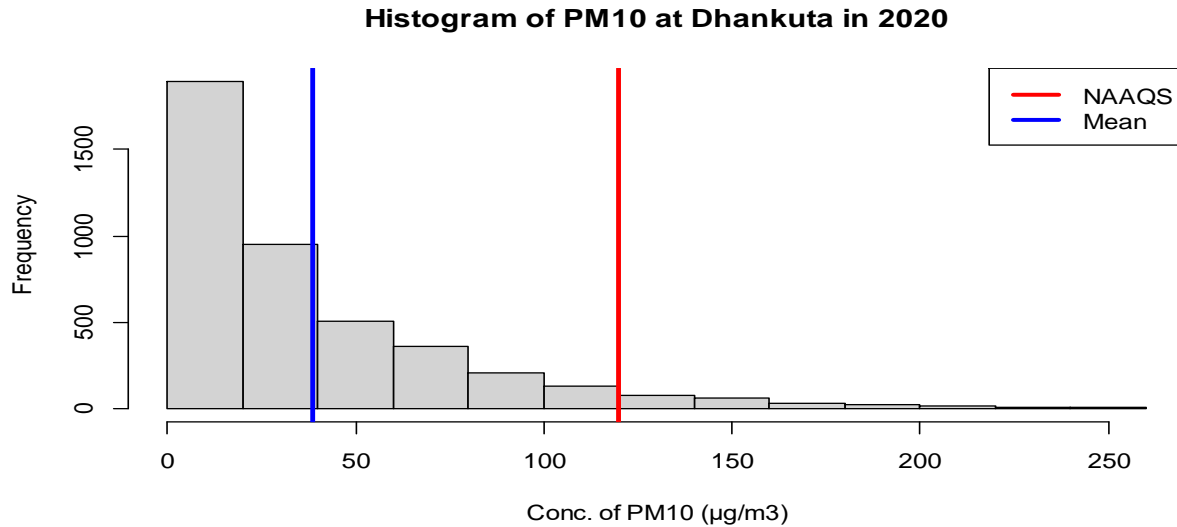


Figure 38 : Histogram for the ambient concentration of PM<sub>10</sub>.

#### Daily average of PM10:

Daily average concentration of PM<sub>10</sub> was high during October and November and was found low during July and August as shown in figure below.

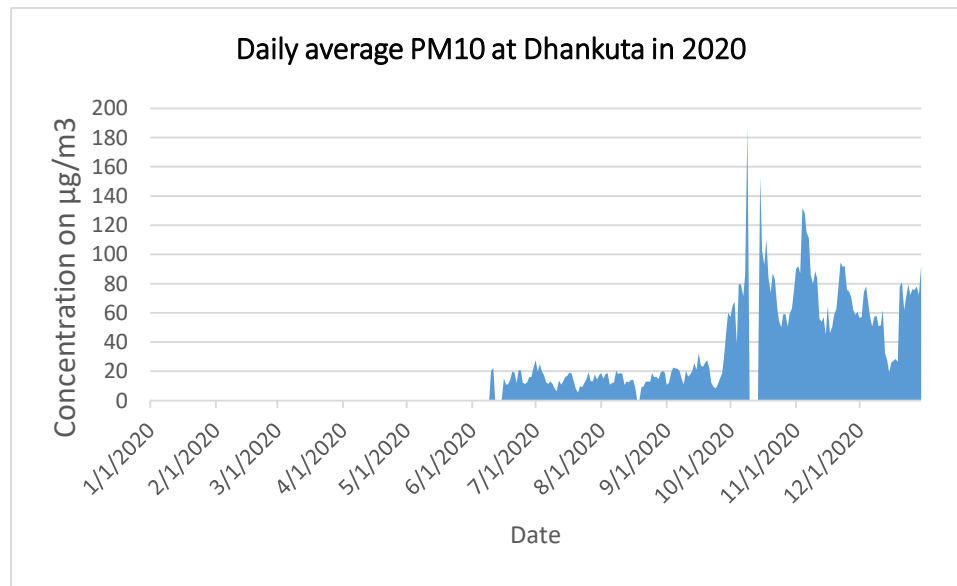


Figure 39: Daily average of PM<sub>10</sub>

### Monthly average of PM<sub>10</sub>

The highest and the lowest monthly average of PM<sub>2.5</sub> was found during November (155 µg/m<sup>3</sup>) and June (15.62 µg/m<sup>3</sup>) respectively as shown in figure below.

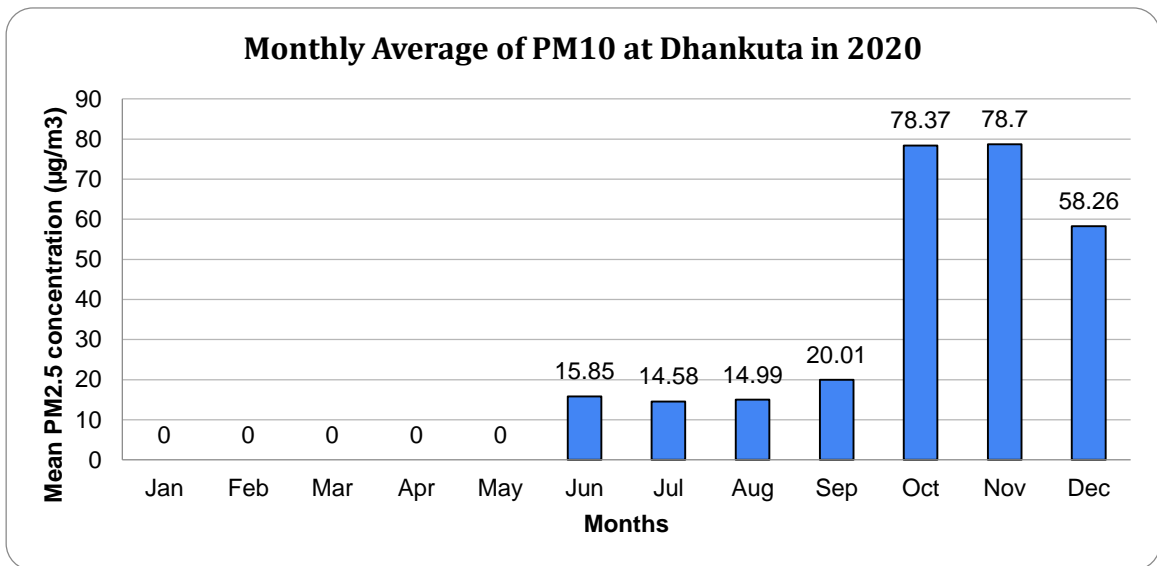


Figure 40: Monthly average of Pm<sub>10</sub>

### Monthly variation of PM<sub>10</sub>

Variation in concentration of PM<sub>10</sub> was found more during November and low during June, July.

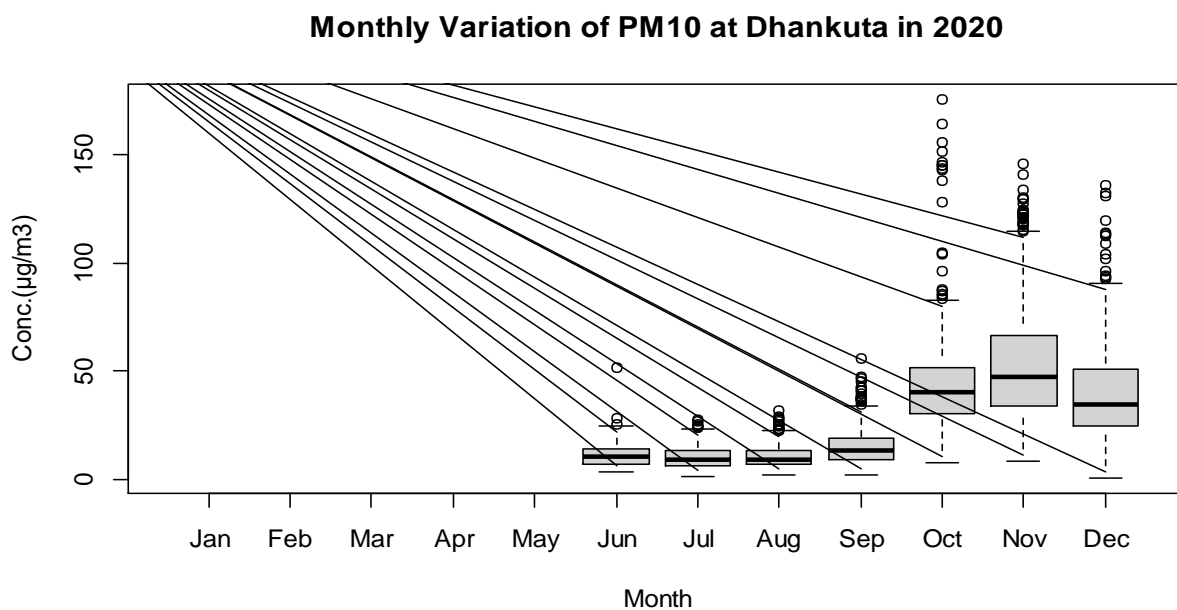


Figure 41: Monthly Variation of PM<sub>10</sub>

### Seasonal variation of average PM<sub>10</sub> concentration:

Ambient concentration of average PM<sub>10</sub> during monsoon (June-September), and post-monsoon (October-November) can be shown in the figure below. The concentration of PM<sub>10</sub> was found higher during post monsoon (111.26 µg/m<sup>3</sup>) than monsoon season (23.05 µg/m<sup>3</sup>) as shown in figure below.

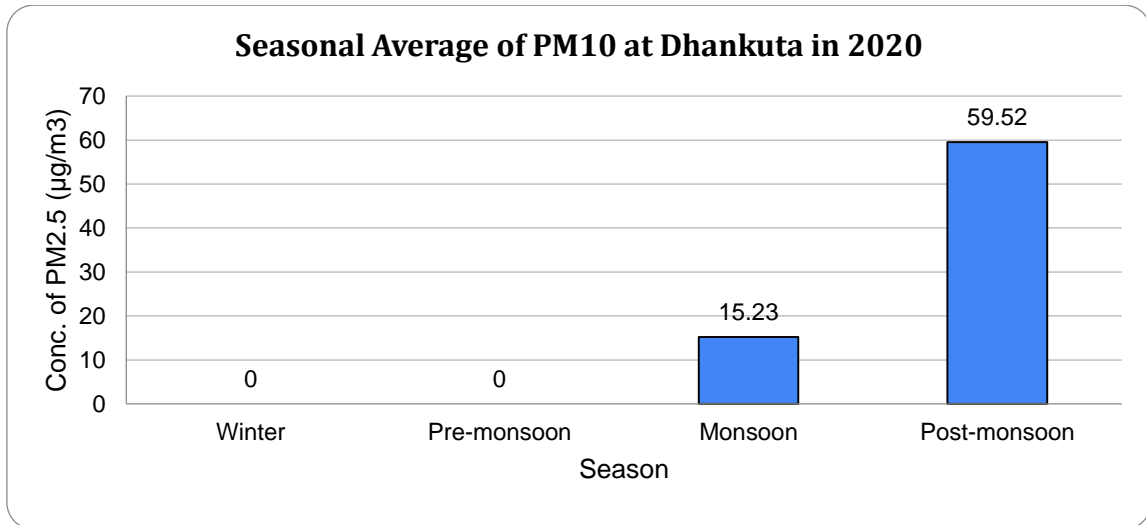


Figure 42: Seasonal variation of PM<sub>10</sub>.

### Diurnal variation of average PM<sub>10</sub> concentration

The diurnal variation of average PM<sub>10</sub> concentrations can be shown in the **Error! Reference source not found.** below. The variation in PM<sub>10</sub> concentration was high at around 5 pm and low at 11 am to 2 pm.

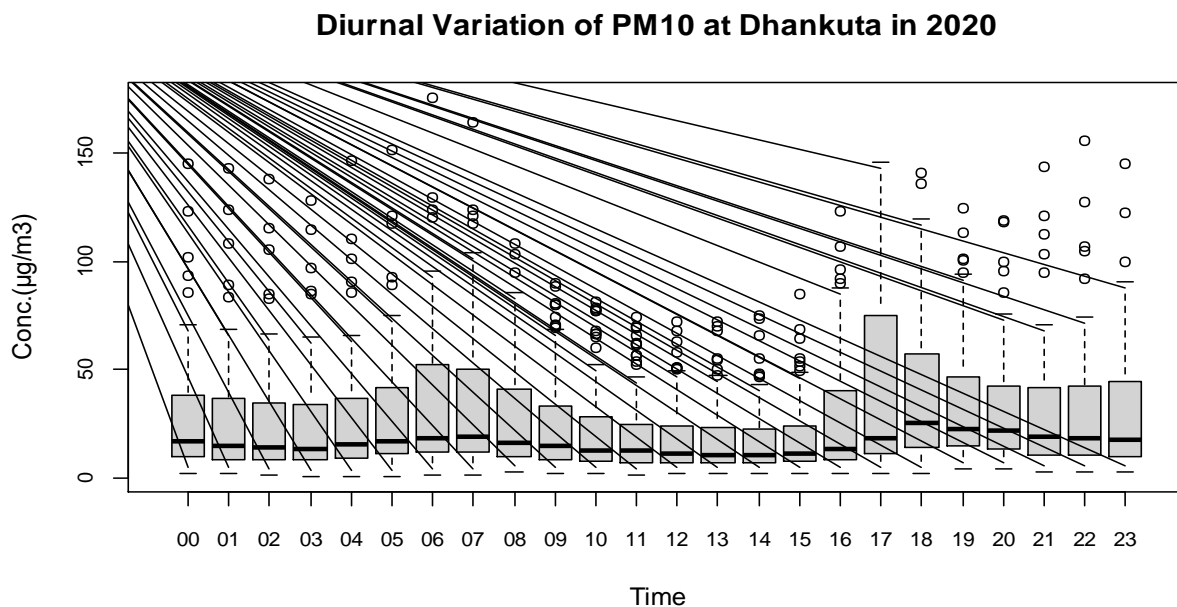


Figure 43: Diurnal variation of PM<sub>10</sub> concentration

## Compliance status of PM<sub>10</sub>

The total days of PM<sub>10</sub> monitored in the year 2020 counts 192, of which 4 days exceed the NAAQS guideline as shown in figure below.

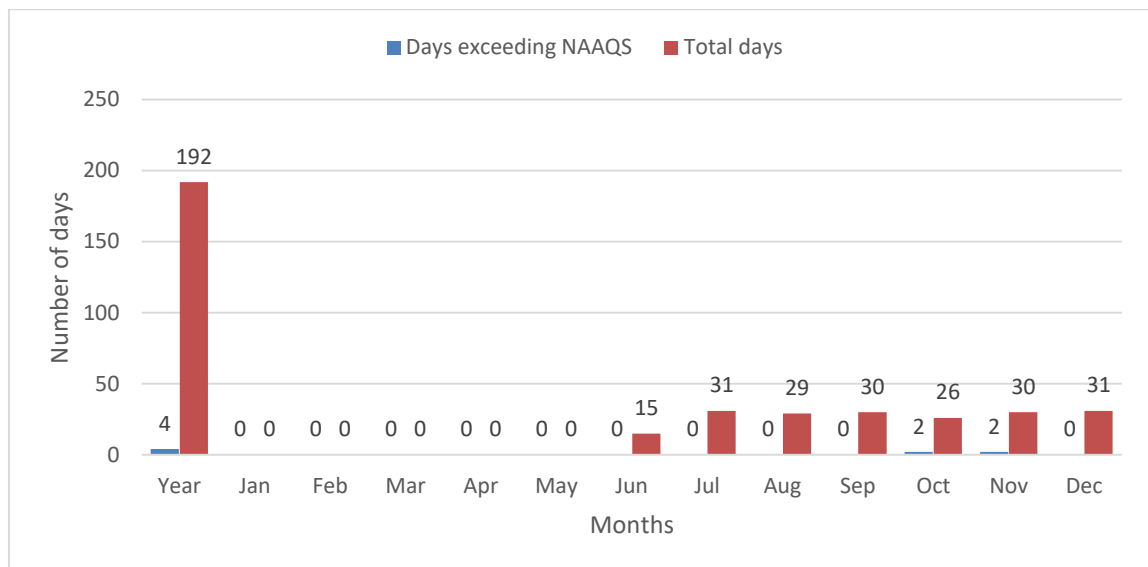


Figure 44: Compliance status of PM<sub>10</sub>

### 2.2.4 Temporal Variation of TSP

#### Annual average of TSP

The annual average of TSP at Dhankuta station was found to be 162  $\mu\text{g}/\text{m}^3$ . Histogram of hourly average TSP is shown in the figure below.

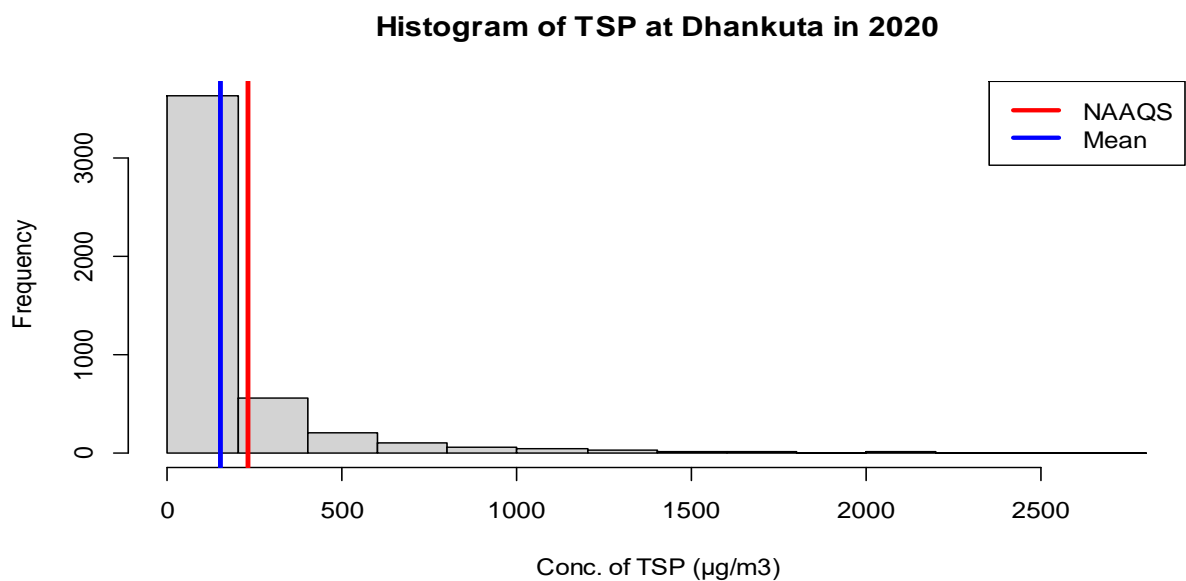


Figure 45 : Histogram for the ambient concentration of TSP

### Daily average of TSP:

Daily average concentration of TSP was high during October, November and December and was found low during July and August.

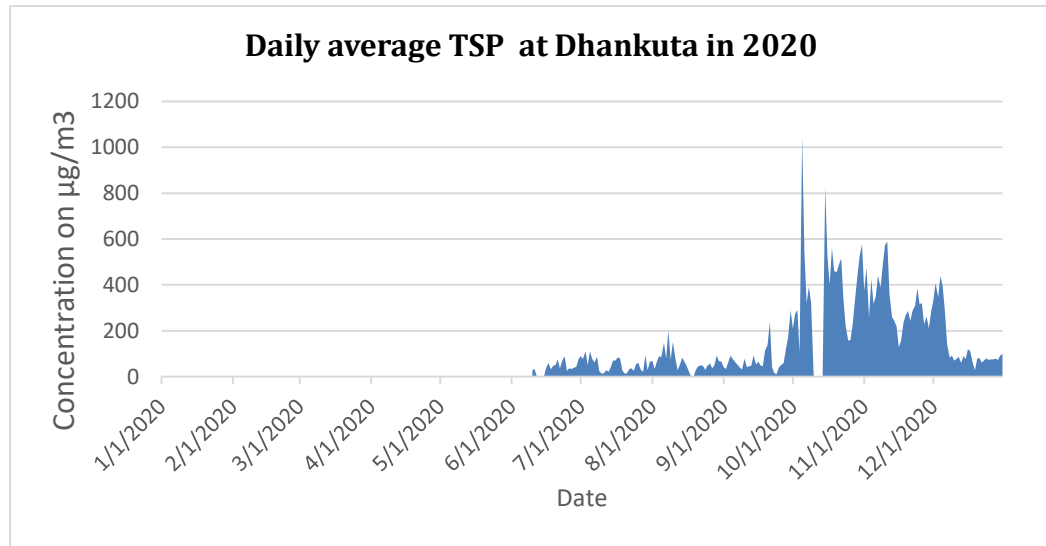


Figure 46: Daily average of TSP

### Monthly average of TSP

The highest and the lowest monthly average of PM<sub>2.5</sub> was found during October (401 µg/m<sup>3</sup>) and June (28 µg/m<sup>3</sup>) respectively.

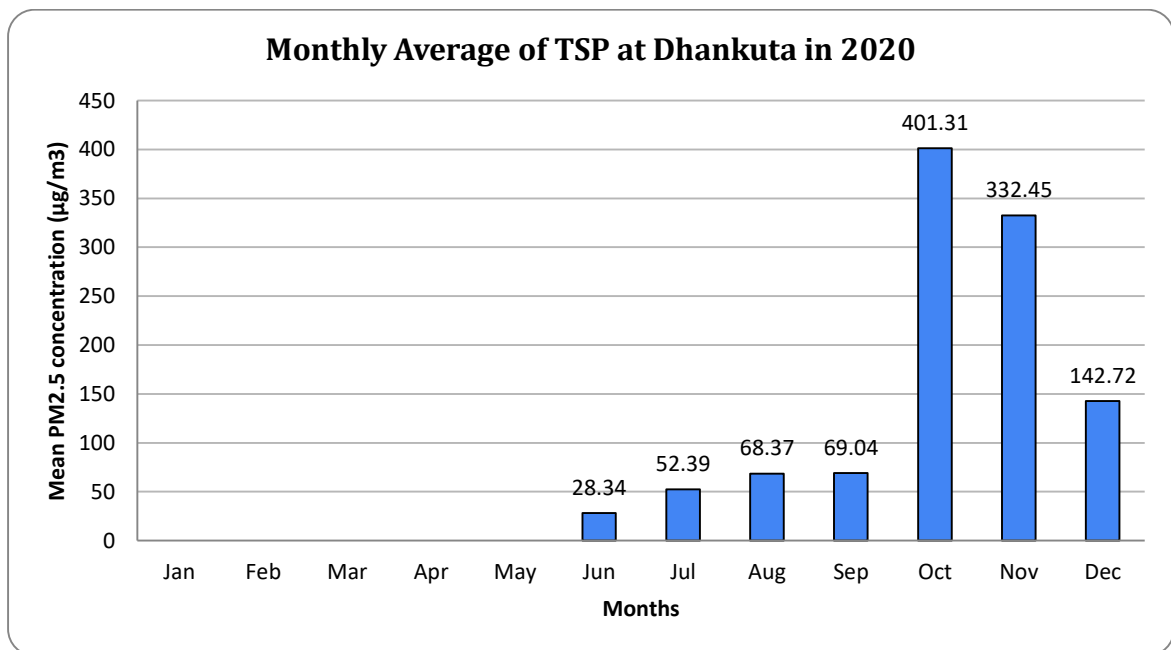


Figure 47: Monthly Average of TSP

### Monthly variation of TSP

Variation in concentration of TSP was found more during October and low during May as shown in figure below.

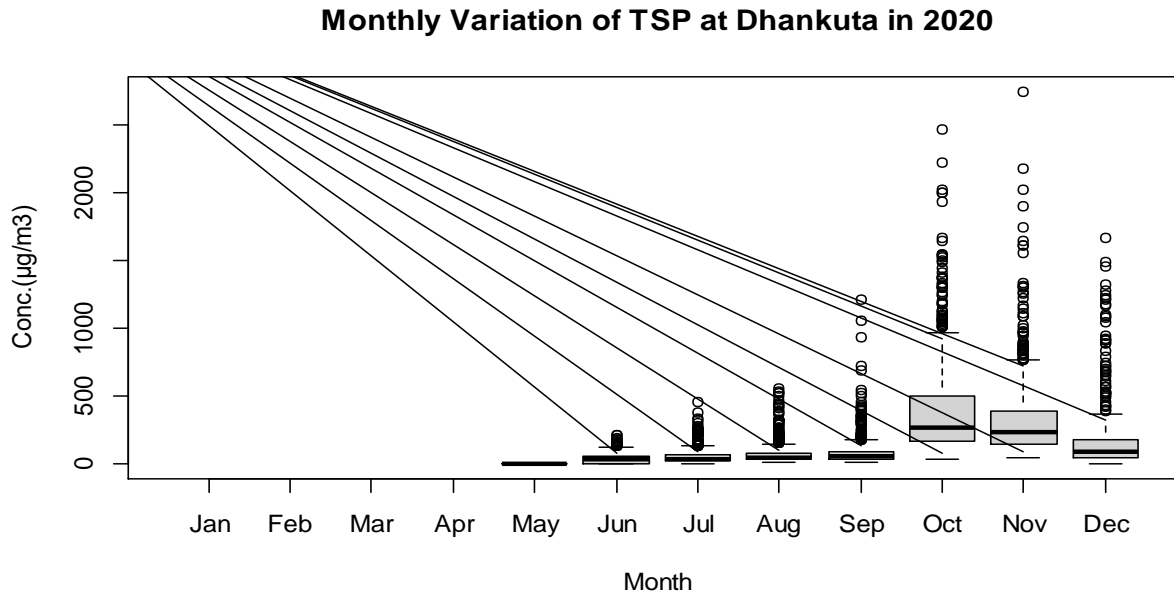


Figure 48: Monthly Variation of TSP.

### Seasonal variation of average TSP concentration

Ambient concentration of average TSP during monsoon (June-September), and post-monsoon (October-November) can be shown in the **Error! Reference source not found.** below. The concentration of TSP was found higher during post monsoon ( $267 \mu\text{g}/\text{m}^3$ ) than monsoon season ( $49.7 \mu\text{g}/\text{m}^3$ ) as shown in figure below.

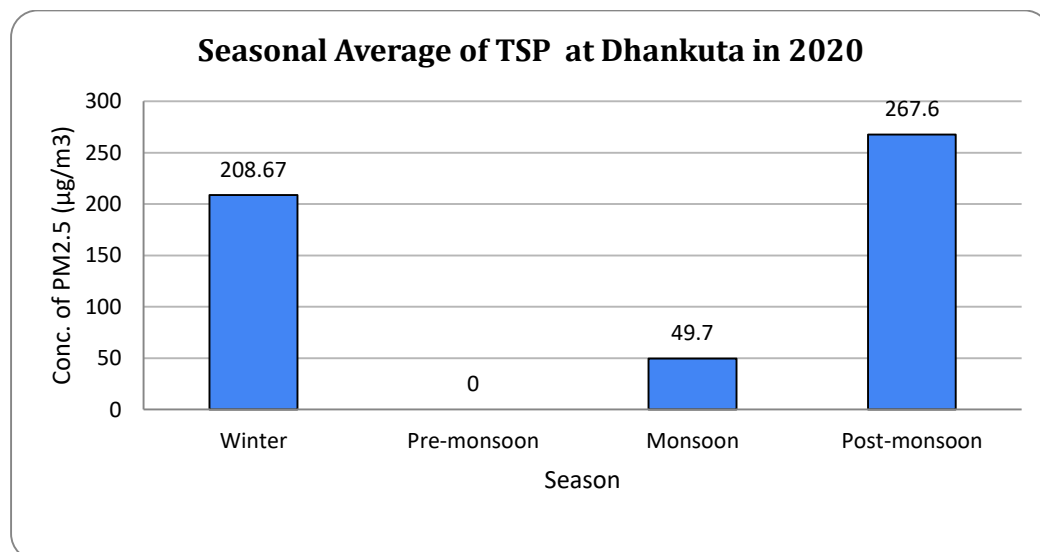


Figure 49: Seasonal variation of TSP

### Diurnal variation pf average TSP concentration

The diurnal variation of average TSP concentrations can be shown in the **Error! Reference source not found.** below. The variation in TSP concentration was high at around 8-10 am and low at 2 to 3 am.

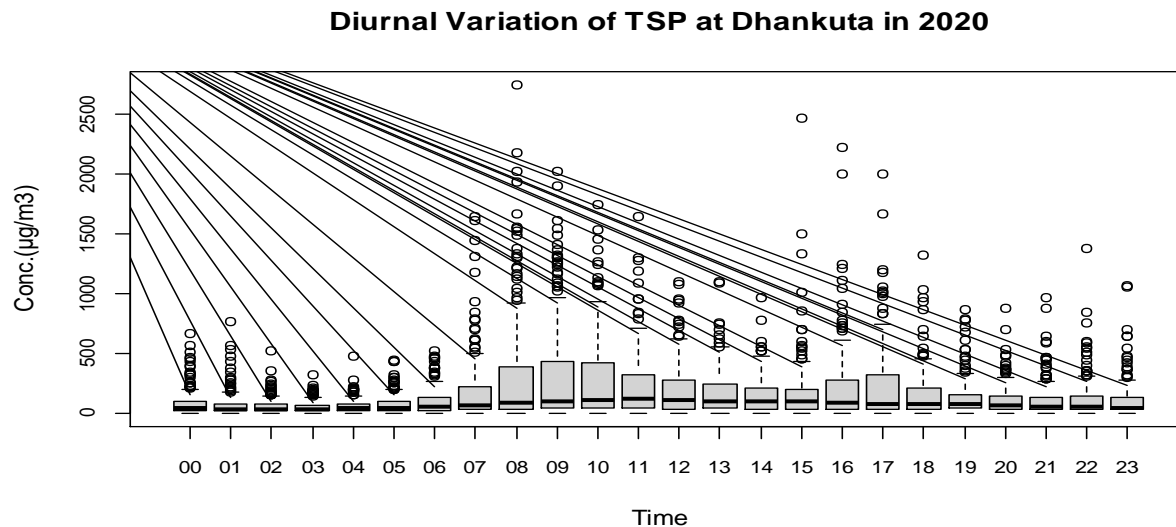


Figure 50: Diurnal Variation of TSP

### Compliance status of TSP

The total days of TSP monitored in the year 2020 counts 192, of which 53 days exceed the NAAQS guideline as shown in figure below.

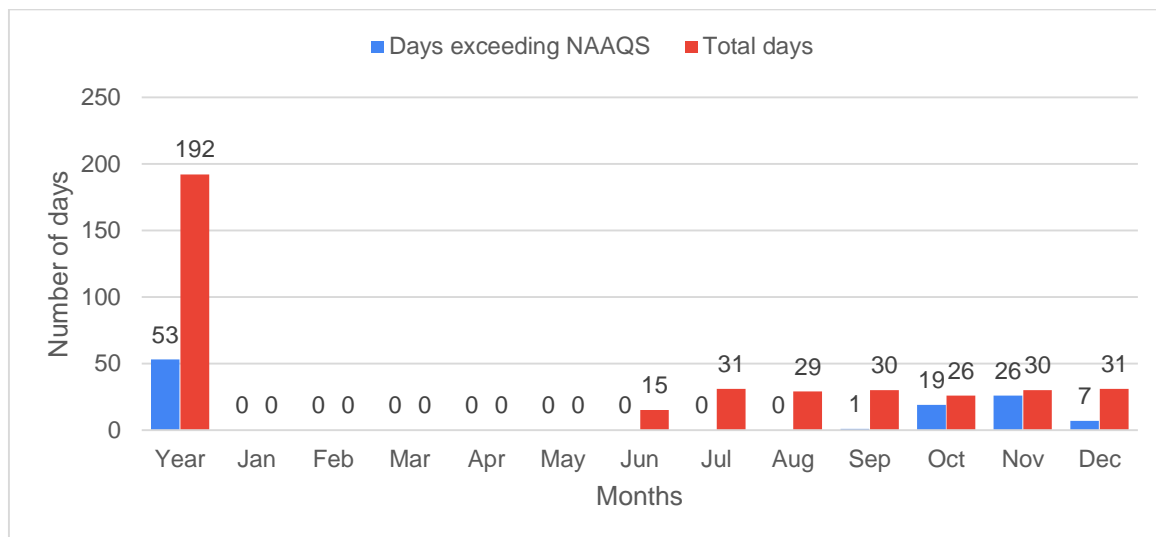


Figure 51: Compliance status of TSP



## Annex

### Daily Average

Date	PM1	PM2.5	PM10	TSP	Date	PM1	PM2.5	PM10	TSP
1/1/2019					1/1/2020	19.95			
1/2/2019					1/2/2020	20.11			
1/3/2019					1/3/2020	14.74			
1/4/2019					1/4/2020	27.85	29.48	33.72	39.51
1/5/2019					1/5/2020	26.98	28.47	32.06	43.34
1/6/2019					1/6/2020	37.85	40.42	45.69	57.32
1/7/2019					1/7/2020	32.19	34.22	40.91	59.27
1/8/2019					1/8/2020	28.56	30.75	38.73	57.36
1/9/2019					1/9/2020	33.94	36.19	44.04	57.39
1/10/2019					1/10/2020	49.52	53.34	61.46	73.03
1/11/2019					1/11/2020	43.31	46.08	54.30	69.77
1/12/2019					1/12/2020	21.98	23.60	31.75	57.46
1/13/2019					1/13/2020	19.95	21.92	32.90	65.91
1/14/2019					1/14/2020	22.45	24.75	36.73	70.93
1/15/2019					1/15/2020	36.93	39.50	49.88	70.85
1/16/2019					1/16/2020	40.04	43.69	62.88	110.13
1/17/2019					1/17/2020	36.87	39.43	46.30	60.33
1/18/2019					1/18/2020	28.53	30.07	33.71	40.31
1/19/2019					1/19/2020	37.36	40.20	49.25	75.89
1/20/2019					1/20/2020	29.48	31.80	40.31	64.26
1/21/2019					1/21/2020	38.41	41.68	52.40	82.40
1/22/2019					1/22/2020	50.93	55.43	67.71	98.58
1/23/2019					1/23/2020	64.49	69.91	84.86	126.00
1/24/2019					1/24/2020	98.72	106.76	123.13	148.70
1/25/2019					1/25/2020	76.12	81.52	98.57	143.11
1/26/2019					1/26/2020	69.34	74.57	93.22	139.98
1/27/2019					1/27/2020	59.90	64.22	79.60	114.10
1/28/2019					1/28/2020	68.82	74.31	95.40	139.66
1/29/2019					1/29/2020	80.70	87.23	111.34	156.68
1/30/2019					1/30/2020	98.01	105.36	127.89	186.89
1/31/2019					1/31/2020	82.64	89.88	104.56	126.11
2/1/2019					2/1/2020	71.59	78.26	94.49	117.38
2/2/2019					2/2/2020	66.00	71.91	90.22	124.54
2/3/2019					2/3/2020	65.44	71.37	91.76	143.19
2/4/2019					2/4/2020	69.14	75.44	97.86	145.26
2/5/2019					2/5/2020	64.60	70.45	94.85	173.55
2/6/2019					2/6/2020	82.96	90.82	120.32	173.26
2/7/2019					2/7/2020	87.31	95.92	128.83	185.33
2/8/2019					2/8/2020	62.98	69.20	100.58	178.11
2/9/2019					2/9/2020	38.21	42.54	68.46	150.94
2/10/2019					2/10/2020	43.42	48.94	81.91	194.39
2/11/2019					2/11/2020	52.12	58.24	91.88	181.06
2/12/2019					2/12/2020	49.38	55.48	88.51	175.95
2/13/2019					2/13/2020	50.03	56.53	93.78	191.60
2/14/2019					2/14/2020	72.82	80.30	116.65	196.34
2/15/2019					2/15/2020	119.87	130.09	164.01	202.71
2/16/2019					2/16/2020	117.75	128.46	167.13	219.25
2/17/2019					2/17/2020	110.15	119.29	150.45	205.72
2/18/2019					2/18/2020	98.38	106.97	136.15	192.33
2/19/2019					2/19/2020	112.39	121.83	149.98	184.88
2/20/2019					2/20/2020	103.69	113.28	145.83	178.49
2/21/2019					2/21/2020	74.57	81.50	109.40	153.77
2/22/2019					2/22/2020	52.66	57.59	77.80	120.53

2/23/2019					2/23/2020	31.63	35.96	63.48	154.10
2/24/2019					2/24/2020	25.87	28.51	41.20	81.93
2/25/2019					2/25/2020	22.20	23.85	29.05	41.82
2/26/2019					2/26/2020	9.30	10.61	13.22	18.71
2/27/2019					2/27/2020	20.35	22.24	30.57	50.48
2/28/2019					2/28/2020	32.34	34.95	46.75	71.77
3/1/2019					2/29/2020	31.01	33.97	48.01	80.85
3/2/2019					3/1/2020	34.89	38.58	57.04	102.25
3/3/2019					3/2/2020	27.43	30.82	46.27	96.89
3/4/2019					3/3/2020	33.76	41.66	64.73	118.82
3/5/2019					3/4/2020	35.02	43.52	70.27	121.22
3/6/2019					3/5/2020	33.99	39.46	60.38	119.64
3/7/2019					3/6/2020	30.19	33.61	45.55	74.61
3/8/2019					3/7/2020	23.18	25.81	33.01	57.00
3/9/2019					3/8/2020	25.39	28.00	35.58	51.53
3/10/2019					3/9/2020	36.63	41.44	54.29	71.91
3/11/2019					3/10/2020	49.83	55.62	73.07	106.25
3/12/2019					3/11/2020	51.93	57.73	77.22	114.62
3/13/2019					3/12/2020	50.50	57.87	83.52	135.61
3/14/2019					3/13/2020	41.68	46.86	63.44	102.98
3/15/2019					3/14/2020	40.08	43.81	55.76	76.07
3/16/2019					3/15/2020	20.98	24.18	39.90	92.64
3/17/2019					3/16/2020	18.63	22.82	47.33	122.51
3/18/2019					3/17/2020	28.40	34.85	66.73	162.47
3/19/2019					3/18/2020	42.76	50.59	85.03	177.79
3/20/2019					3/19/2020	54.90	63.55	98.97	192.98
3/21/2019					3/20/2020	38.32	43.54	60.79	106.94
3/22/2019					3/21/2020	27.31	30.89	39.07	62.41
3/23/2019					3/22/2020	33.39	36.15	43.36	56.85
3/24/2019					3/23/2020	24.12	26.32	32.15	40.34
3/25/2019					3/24/2020	27.69	30.78	41.16	62.55
3/26/2019					3/25/2020	43.27	47.44	60.09	84.09
3/27/2019					3/26/2020	49.10	55.15	72.88	97.71
3/28/2019					3/27/2020	62.21	70.63	96.51	131.03
3/29/2019					3/28/2020	31.94	40.87	93.07	293.57
3/30/2019					3/29/2020	22.60	30.12	79.25	269.32
3/31/2019					3/30/2020	33.02	42.07	88.57	228.49
4/1/2019					3/31/2020	40.77	48.85	90.15	195.85
4/2/2019					4/1/2020	40.80	47.10	73.70	146.94
4/3/2019					4/2/2020	27.52	35.28	65.77	166.25
4/4/2019					4/3/2020	34.17	41.89	75.97	177.49
4/5/2019					4/4/2020	45.96	53.26	92.99	205.73
4/6/2019					4/5/2020	58.28	66.10	111.41	233.73
4/7/2019					4/6/2020	58.75	68.76	121.09	248.28
4/8/2019					4/7/2020	53.54	62.90	110.38	254.19
4/9/2019					4/8/2020	51.28	62.22	116.70	253.74
4/10/2019					4/9/2020	39.19	46.47	73.98	176.72
4/11/2019					4/10/2020	34.95	42.61	79.36	181.00
4/12/2019					4/11/2020	40.08	46.57	76.01	182.75
4/13/2019					4/12/2020	43.22	48.27	65.74	122.97
4/14/2019					4/13/2020	43.71	48.50	66.26	116.46
4/15/2019					4/14/2020	46.23	50.55	64.84	97.97
4/16/2019					4/15/2020	60.94	66.34	78.31	107.43
4/17/2019					4/16/2020	29.28	31.97	38.90	71.76
4/18/2019					4/17/2020	30.37	33.69	40.73	69.57
4/19/2019					4/18/2020	28.70	32.29	42.27	68.97
4/20/2019					4/19/2020	33.30	39.83	56.50	105.69
4/21/2019					4/20/2020	27.92	32.15	43.92	80.52
4/22/2019					4/21/2020	21.66	24.66	29.31	36.65
4/23/2019					4/22/2020	12.27	13.95	17.63	26.34
4/24/2019					4/23/2020	25.06	27.66	36.00	49.09

4/25/2019					4/24/2020	22.80	24.81	29.74	34.93
4/26/2019					4/25/2020	23.78	25.77	31.18	38.64
4/27/2019					4/26/2020	21.91	24.07	31.70	48.72
4/28/2019					4/27/2020	21.40	23.61	31.24	46.50
4/29/2019					4/28/2020	13.31	14.80	18.19	26.01
4/30/2019					4/29/2020	16.35	17.77	22.22	36.14
5/1/2019					4/30/2020	16.31	17.98	22.78	32.23
5/2/2019					5/1/2020	14.90	16.27	19.70	27.18
5/3/2019					5/2/2020	15.48	17.40	22.04	31.05
5/4/2019					5/3/2020	15.47	17.33	24.36	42.94
5/5/2019					5/4/2020	16.66	18.66	25.98	38.35
5/6/2019					5/5/2020	14.82	17.21	23.72	32.60
5/7/2019					5/6/2020	10.37	12.56	20.31	50.64
5/8/2019					5/7/2020	11.01	12.77	18.40	28.94
5/9/2019					5/8/2020	14.53	17.05	26.42	52.49
5/10/2019					5/9/2020	23.97	27.47	40.25	76.61
5/11/2019					5/10/2020	36.11	40.24	57.16	107.93
5/12/2019					5/11/2020	43.63	47.32	65.19	103.87
5/13/2019					5/12/2020	32.93	36.94	57.01	133.74
5/14/2019					5/13/2020	35.23	41.15	63.21	102.96
5/15/2019					5/14/2020	40.79	45.65	59.68	73.50
5/16/2019					5/15/2020	39.40	44.05	55.63	67.10
5/17/2019					5/16/2020	35.03	40.08	54.61	66.00
5/18/2019					5/17/2020	29.42	35.10	54.59	105.94
5/19/2019					5/18/2020	28.88	34.64	53.59	82.55
5/20/2019					5/19/2020	27.53	32.09	47.96	74.43
5/21/2019					5/20/2020	27.74	31.12	42.95	55.00
5/22/2019					5/21/2020	12.96	14.05	16.99	22.56
5/23/2019					5/22/2020	8.78	9.95	12.10	18.33
5/24/2019					5/23/2020	27.61	31.85	44.60	56.24
5/25/2019					5/24/2020	29.63	35.56	49.73	60.27
5/26/2019					5/25/2020	26.86	33.18	55.02	110.01
5/27/2019					5/26/2020	18.36	23.48	44.28	107.51
5/28/2019					5/27/2020	16.84	19.71	26.84	39.92
5/29/2019					5/28/2020	15.48	18.11	24.08	33.28
5/30/2019					5/29/2020	13.31	16.22	23.28	39.31
5/31/2019					5/30/2020	14.18	16.92	22.88	32.30
6/1/2019					5/31/2020	17.34	20.44	26.05	28.33
6/2/2019					6/1/2020	20.49	25.74	36.13	44.25
6/3/2019					6/2/2020	20.72	26.24	38.26	56.06
6/4/2019					6/3/2020	35.79	43.05	60.54	77.67
6/5/2019					6/4/2020	33.78	39.37	52.79	75.63
6/6/2019					6/5/2020	19.32	22.77	29.50	34.54
6/7/2019					6/6/2020	10.01	11.11	13.85	17.21
6/8/2019					6/7/2020	11.96	13.57	18.46	28.47
6/9/2019					6/8/2020	23.57	26.76	38.36	61.72
6/10/2019					6/9/2020	24.38	27.44	37.19	53.18
6/11/2019					6/10/2020	22.94	26.08	35.82	51.57
6/12/2019					6/11/2020	18.04	20.35	26.95	35.84
6/13/2019					6/12/2020	7.95	9.46	12.90	17.69
6/14/2019					6/13/2020	6.83	8.45	11.64	17.34
6/15/2019					6/14/2020	8.42	10.12	13.79	19.28
6/16/2019					6/15/2020	7.55	9.23	12.55	16.42
6/17/2019					6/16/2020	5.74	6.74	8.60	10.91
6/18/2019					6/17/2020	9.14	11.29	15.18	21.96
6/19/2019					6/18/2020	8.37	9.56	12.17	15.06
6/20/2019					6/19/2020	15.80	17.98	22.66	26.02
6/21/2019					6/20/2020	15.72	18.99	25.16	27.62
6/22/2019					6/21/2020	12.42	15.26	20.68	26.36
6/23/2019					6/22/2020	7.89	11.16	15.76	23.93
6/24/2019					6/23/2020	11.15	15.75	22.24	30.37

6/25/2019					6/24/2020	18.48	22.27	29.84	40.74
6/26/2019					6/25/2020	10.43	12.39	16.08	21.02
6/27/2019					6/26/2020	8.54	10.31	13.02	16.38
6/28/2019					6/27/2020	13.28	15.23	19.48	23.90
6/29/2019					6/28/2020	11.58	13.64	17.47	22.58
6/30/2019					6/29/2020	11.82	14.42	18.86	23.06
7/1/2019					6/30/2020	16.62	22.35	31.62	41.51
7/2/2019					7/1/2020	24.54	30.37	40.59	49.35
7/3/2019					7/2/2020	23.97	28.14	37.15	46.38
7/4/2019					7/3/2020	18.15	21.19	28.11	34.79
7/5/2019					7/4/2020	8.30	9.78	12.99	19.44
7/6/2019					7/5/2020	7.61	9.45	14.61	27.42
7/7/2019					7/6/2020	3.61	6.04	8.81	15.58
7/8/2019					7/7/2020	5.93	7.76	11.31	17.66
7/9/2019					7/8/2020	10.23	12.89	17.45	24.14
7/10/2019					7/9/2020	10.52	12.39	16.88	27.00
7/11/2019					7/10/2020	6.06	8.52	10.92	16.55
7/12/2019					7/11/2020	5.35	8.28	10.61	17.04
7/13/2019					7/12/2020	10.82	12.68	15.91	19.36
7/14/2019	12.74	14.75	18.58	328.43	7/13/2020	12.02	13.80	17.63	21.90
7/15/2019					7/14/2020	12.05	13.95	18.69	26.26
7/16/2019	17.04	31.70	46.81	731.84	7/15/2020	11.24	13.19	17.37	25.20
7/17/2019	14.27	26.99	43.86	639.63	7/16/2020	8.65	10.15	13.82	21.65
7/18/2019	16.17	26.88	40.72	573.17	7/17/2020	10.02	12.07	17.03	26.25
7/19/2019	18.12	26.04	39.60	621.25	7/18/2020	11.19	12.66	16.19	20.56
7/20/2019	17.81	20.94	27.31	347.96	7/19/2020	7.56	9.27	11.63	16.95
7/21/2019	20.73	24.71	32.56	394.49	7/20/2020	5.27	8.87	11.66	18.20
7/22/2019	19.45	22.44	28.59	343.27	7/21/2020	8.88	10.03	12.54	14.89
7/23/2019	17.73	20.05	25.12	330.69	7/22/2020	10.23	11.88	15.67	20.43
7/24/2019	11.94	14.80	18.51	257.52	7/23/2020	7.38	8.56	10.65	13.51
7/25/2019	6.76	9.10	11.78	184.88	7/24/2020	7.98	10.18	13.33	17.31
7/26/2019	7.77	10.12	13.64	196.84	7/25/2020	12.83	14.58	18.72	23.39
7/27/2019	4.30	5.53	7.93	128.83	7/26/2020	17.25	19.09	24.82	37.08
7/28/2019	4.42	5.68	9.80	232.18	7/27/2020	14.60	17.10	20.92	26.41
7/29/2019	4.85	6.35	10.18	206.94	7/28/2020	13.31	14.97	18.43	22.27
7/30/2019	11.75	15.05	20.73	280.35	7/29/2020	19.57	22.11	29.02	41.13
7/31/2019	12.68	15.52	22.36	333.81	7/30/2020	12.39	13.98	17.66	23.45
8/1/2019	11.25	14.93	23.36	368.10	7/31/2020	13.45	15.19	19.21	24.90
8/2/2019	8.19	10.05	14.66	247.98	8/1/2020	11.24	12.90	16.95	22.70
8/3/2019	11.48	13.43	18.32	236.14	8/2/2020	11.53	13.60	18.85	28.77
8/4/2019	9.07	11.22	17.39	297.30	8/3/2020	10.49	12.79	18.50	31.71
8/5/2019	9.87	12.69	21.10	338.24	8/4/2020	9.65	11.80	18.73	36.93
8/6/2019	5.26	7.63	14.53	324.38	8/5/2020	4.58	5.68	9.62	33.67
8/7/2019	2.64	3.64	6.57	186.31	8/6/2020	4.51	5.85	8.44	15.42
8/8/2019	2.75	3.73	7.80	295.41	8/7/2020	9.49	10.90	14.28	19.03
8/9/2019	8.04	9.97	13.34	185.65	8/8/2020	13.92	15.57	20.27	27.30
8/10/2019	10.47	13.08	18.09	255.04	8/9/2020	10.81	12.61	16.62	21.38
8/11/2019	8.54	10.80	16.68	287.15	8/10/2020	10.55	13.00	17.00	21.36
8/12/2019	7.81	10.15	18.22	350.50	8/11/2020	8.81	11.99	16.37	23.88
8/13/2019	4.47	5.67	9.78	214.44	8/12/2020	6.66	8.53	11.14	15.83
8/14/2019	4.71	6.51	11.94	256.75	8/13/2020	7.66	9.74	14.31	25.42
8/15/2019	13.64	17.36	22.62	321.97	8/14/2020	12.47	14.54	18.36	22.41
8/16/2019	11.14	13.42	17.28	219.79	8/15/2020	7.08	8.27	10.56	12.65
8/17/2019	12.92	14.95	18.87	222.30	8/16/2020	6.03	7.19	9.52	13.74
8/18/2019	14.46	17.43	24.50	361.03	8/17/2020				
8/19/2019	12.44	15.05	19.69	270.08	8/18/2020				
8/20/2019	17.08	20.17	27.74	412.62	8/19/2020				
8/21/2019	18.29	22.03	30.82	427.24	8/20/2020	2.70	3.41	5.28	16.85
8/22/2019	16.52	21.15	33.09	527.87	8/21/2020	3.25	4.14	5.13	6.80
8/23/2019	12.98	16.12	24.43	370.58	8/22/2020	8.85	10.40	13.12	17.54
8/24/2019	7.75	9.59	13.23	193.57	8/23/2020	8.74	10.24	13.12	17.82

8/25/2019	4.60	5.84	9.56	185.50	8/24/2020	9.60	11.03	14.66	20.54
8/26/2019	11.49	14.13	21.00	324.55	8/25/2020	12.09	13.80	18.57	25.34
8/27/2019	18.69	21.41	29.82	426.05	8/26/2020	10.31	12.26	16.43	22.11
8/28/2019	19.85	23.64	36.21	433.66	8/27/2020	5.88	7.05	8.81	10.90
8/29/2019	13.51	15.72	21.17	300.93	8/28/2020	10.85	12.62	16.26	21.46
8/30/2019	16.09	18.42	24.66	353.80	8/29/2020	17.80	19.95	24.63	29.73
8/31/2019	19.91	22.08	27.35	348.82	8/30/2020	21.91	24.20	29.15	31.94
9/1/2019	14.78	17.35	23.63	345.98	8/31/2020	18.07	20.28	25.46	29.66
9/2/2019	11.08	12.93	18.81	292.34	9/1/2020	10.06	11.36	13.92	16.35
9/3/2019	6.19	7.48	11.78	237.83	9/2/2020	11.67	13.29	17.34	23.29
9/4/2019	7.33	9.30	13.28	204.29	9/3/2020	16.68	18.74	24.68	31.18
9/5/2019	9.00	11.09	16.17	278.90	9/4/2020	20.42	22.59	29.07	37.90
9/6/2019	9.43	10.97	14.91	200.57	9/5/2020	28.74	31.49	39.03	44.52
9/7/2019	6.70	8.04	11.21	174.69	9/6/2020	23.76	25.72	31.16	35.57
9/8/2019	7.14	8.91	12.46	184.58	9/7/2020	10.82	11.88	14.03	16.84
9/9/2019	10.76	12.82	17.17	246.65	9/8/2020	8.95	10.15	12.10	14.75
9/10/2019	14.31	16.42	22.19	334.67	9/9/2020	13.88	15.23	18.58	22.91
9/11/2019	15.75	18.21	24.40	344.42	9/10/2020	18.60	20.48	24.92	28.50
9/12/2019	4.96	6.48	13.26	353.08	9/11/2020	18.68	20.64	25.91	32.64
9/13/2019	8.68	10.57	13.88	201.80	9/12/2020	20.05	22.19	27.87	34.18
9/14/2019	10.45	12.20	15.78	191.77	9/13/2020	17.75	19.20	22.99	26.62
9/15/2019	16.17	18.33	24.04	325.31	9/14/2020	18.61	20.38	24.07	29.33
9/16/2019	13.99	15.39	18.80	221.33	9/15/2020	16.90	18.24	20.73	24.32
9/17/2019	10.58	11.98	15.17	195.94	9/16/2020	22.84	24.75	29.43	32.84
9/18/2019	8.76	10.53	13.64	183.23	9/17/2020	16.24	18.01	22.59	27.66
9/19/2019	7.22	9.21	15.97	342.85	9/18/2020	14.33	15.75	19.42	22.82
9/20/2019	14.89	17.03	24.12	423.77	9/19/2020	10.99	12.87	18.21	28.44
9/21/2019	17.29	19.34	25.18	359.87	9/20/2020	6.15	7.86	14.17	31.48
9/22/2019	17.99	20.67	27.75	381.04	9/21/2020	7.71	9.47	12.74	17.06
9/23/2019	16.79	18.99	24.59	327.26	9/22/2020	3.77	4.70	5.81	7.23
9/24/2019	11.15	13.05	17.18	232.26	9/23/2020	9.55	11.49	14.40	21.16
9/25/2019	7.52	9.31	12.22	183.56	9/24/2020	9.57	11.97	15.19	21.05
9/26/2019	5.05	9.44	13.31	224.45	9/25/2020	8.32	9.92	12.52	18.30
9/27/2019	4.78	7.52	10.62	186.28	9/26/2020	9.80	11.28	14.72	19.91
9/28/2019	5.18	6.41	8.04	102.77	9/27/2020	10.37	12.18	17.22	28.73
9/29/2019	7.98	9.04	10.65	135.55	9/28/2020	12.11	13.92	18.81	27.87
9/30/2019	8.35	9.51	12.06	180.87	9/29/2020	15.64	17.97	25.57	40.41
10/1/2019	11.87	13.55	18.28	288.66	9/30/2020	20.64	24.64	36.06	54.32
10/2/2019	14.38	16.21	21.64	283.95	10/1/2020	25.69	31.54	51.00	96.33
10/3/2019	11.74	13.61	18.64	278.71	10/2/2020	28.11	34.15	52.90	89.95
10/4/2019	19.14	21.64	29.21	434.46	10/3/2020	30.56	36.04	49.64	63.33
10/5/2019	28.38	30.93	39.30	547.35	10/4/2020	20.58	23.73	31.86	43.11
10/6/2019	23.58	25.52	30.08	346.84	10/5/2020	13.81	16.41	23.22	43.15
10/7/2019	23.60	25.94	32.46	386.21	10/6/2020	17.01	19.56	26.27	35.02
10/8/2019	13.24	14.89	20.16	313.92	10/7/2020	18.42	21.45	31.52	55.06
10/9/2019	14.37	16.03	21.43	325.31	10/8/2020	19.94	22.70	31.22	48.46
10/10/2019	15.01	16.70	23.98	418.50	10/9/2020	19.22	22.35	34.24	68.12
10/11/2019	25.32	29.31	41.62	627.37	10/10/2020	10.92	13.31	28.14	74.91
10/12/2019	35.74	40.88	55.96	744.00	10/11/2020	11.51	15.24	42.81	129.15
10/13/2019	34.09	38.89	54.97	783.30	10/12/2020	16.44	20.87	52.34	159.05
10/14/2019	27.58	31.83	46.85	743.74	10/13/2020	23.78	27.84	47.75	102.97
10/15/2019	18.96	21.80	34.28	622.92	10/14/2020	25.69	31.05	55.56	129.51
10/16/2019	17.17	20.12	31.97	607.35	10/15/2020	25.43	30.97	62.56	162.97
10/17/2019	20.99	24.13	38.77	738.18	10/16/2020	25.94	30.57	49.81	102.99
10/18/2019	30.09	33.31	46.21	708.92	10/17/2020	24.16	29.10	48.92	107.20
10/19/2019	30.38	33.61	48.09	791.84	10/18/2020	30.21	36.70	64.83	154.54
10/20/2019	36.70	40.89	55.11	729.10	10/19/2020	24.36	29.88	59.27	172.06
10/21/2019	40.99	45.00	58.44	775.88	10/20/2020	36.55	42.85	68.52	138.20
10/22/2019	39.55	43.92	59.03	887.18	10/21/2020	31.73	36.97	56.80	107.01
10/23/2019	50.89	56.74	76.84	1034.64	10/22/2020	24.93	29.79	52.05	134.16
10/24/2019	71.71	79.28	101.26	1242.18	10/23/2020	21.23	24.31	38.83	102.74

10/25/2019	38.17	41.65	51.99	652.97	10/24/2020	19.71	22.67	31.15	48.80
10/26/2019	19.58	21.58	27.79	383.16	10/25/2020	17.95	20.59	28.04	41.73
10/27/2019	28.73	31.79	41.41	551.40	10/26/2020	37.96	42.50	55.78	66.51
10/28/2019	26.28	29.03	38.97	582.02	10/27/2020	29.90	33.73	47.39	75.04
10/29/2019	14.82	16.78	24.27	453.14	10/28/2020	22.52	25.80	38.93	75.81
10/30/2019	12.54	14.65	22.89	468.39	10/29/2020	13.04	16.28	36.70	114.75
10/31/2019	15.65	18.32	29.35	611.34	10/30/2020	7.36	10.99	39.73	155.55
11/1/2019	21.87	24.64	35.21	662.72	10/31/2020	7.20	11.42	46.86	206.38
11/2/2019	18.09	21.01	31.99	647.16	11/1/2020	13.64	19.42	51.90	188.31
11/3/2019	12.81	15.25	30.21	768.14	11/2/2020	32.78	40.05	75.06	203.64
11/4/2019	13.47	16.49	36.04	1008.24	11/3/2020	52.40	61.38	97.66	199.39
11/5/2019	36.53	41.02	57.97	964.18	11/4/2020	66.30	77.57	123.82	259.54
11/6/2019	51.27	56.70	73.50	982.00	11/5/2020	52.42	61.54	109.07	258.98
11/7/2019	40.29	44.76	61.89	986.32	11/6/2020	67.89	77.23	116.42	214.02
11/8/2019	22.58	26.00	39.12	763.54	11/7/2020	45.67	53.44	94.79	202.83
11/9/2019	17.87	20.50	31.31	613.95	11/8/2020	21.59	27.85	72.43	223.56
11/10/2019	28.28	33.38	47.44	938.26	11/9/2020	16.04	23.60	80.95	285.69
11/11/2019	35.49	39.85	54.98	724.47	11/10/2020	12.14	17.97	59.80	206.33
11/12/2019	44.74	49.95	68.79	1006.39	11/11/2020	10.94	14.40	39.75	148.23
11/13/2019	42.84	47.92	67.09	1003.69	11/12/2020	8.19	10.90	31.44	124.31
11/14/2019	29.07	33.12	48.99	861.72	11/13/2020	13.57	17.27	42.53	125.98
11/15/2019	19.13	22.01	34.96	723.88	11/14/2020	11.29	13.63	29.15	84.99
11/16/2019	49.11	54.25	70.58	1028.01	11/15/2020	17.63	22.27	38.87	91.57
11/17/2019	72.15	79.27	102.16	1305.41	11/16/2020	10.53	12.53	25.45	89.03
11/18/2019	84.08	91.94	116.23	1464.08	11/17/2020	20.97	24.20	41.17	108.24
11/19/2019	94.16	103.00	129.39	1529.04	11/18/2020	31.10	35.38	57.98	126.18
11/20/2019	91.87	99.85	123.61	1448.39	11/19/2020	38.20	43.00	66.56	135.10
11/21/2019	66.81	73.03	94.27	1211.96	11/20/2020	54.93	60.46	82.43	121.38
11/22/2019	45.76	50.44	66.85	983.05	11/21/2020	57.56	62.78	86.11	168.37
11/23/2019	56.55	61.68	66.16	1097.36	11/22/2020				
11/24/2019	76.15	83.32	108.34	1426.75	11/23/2020				
11/25/2019	98.71	107.35	134.09	1567.95	11/24/2020				
11/26/2019	86.85	94.64	120.05	1439.64	11/25/2020				
11/27/2019	49.38	54.34	71.94	967.88	11/26/2020				
11/28/2019	34.03	37.97	54.85	842.70	11/27/2020				
11/29/2019	38.62	43.62	63.10	980.25	11/28/2020				
11/30/2019	59.36	64.66	82.72	1097.89	11/29/2020				
12/1/2019	50.42	55.52	74.47	1035.47	11/30/2020	22.27	26.88	55.34	128.09
12/2/2019	67.21	95.37	160.63	664.38	12/1/2020	19.07	22.73	48.74	134.97
12/3/2019	61.46	67.57	89.67	118.04	12/2/2020				
12/4/2019	53.23	58.62	80.10	113.68	12/3/2020	33.73	39.55	70.99	247.69
12/5/2019	26.03	30.50	62.16	140.37	12/4/2020	37.92	43.00	65.65	118.52
12/6/2019	16.68	20.97	53.06	131.76	12/5/2020	48.44	52.83	70.90	101.87
12/7/2019	11.91	15.19	41.19	110.97	12/6/2020	63.30	68.27	87.13	128.25
12/8/2019	15.57	18.90	42.26	108.94	12/7/2020	66.10	70.50	85.22	106.63
12/9/2019	20.60	24.02	45.75	98.92	12/8/2020	47.63	51.23	65.49	94.03
12/10/2019	38.83	43.99	68.86	118.88	12/9/2020	37.64	41.02	59.53	115.12
12/11/2019	61.31	67.89	94.68	139.14	12/10/2020	39.93	44.72	71.24	141.64
12/12/2019	70.20	77.82	103.46	131.12	12/11/2020	51.70	56.52	73.62	107.84
12/13/2019	38.58	42.18	55.96	78.75	12/12/2020	42.85	47.11	65.57	111.82
12/14/2019	13.11	14.10	16.67	24.89	12/13/2020	53.99	58.68	76.57	124.74
12/15/2019	17.31	18.31	22.16	34.35	12/14/2020	50.51	55.10	72.35	120.17
12/16/2019					12/15/2020	56.28	61.56	80.17	121.33
12/17/2019					12/16/2020	46.59	51.16	71.77	128.43
12/18/2019					12/17/2020	51.30	57.01	82.45	144.59
12/19/2019					12/18/2020	76.86	84.57	108.71	142.42
12/20/2019					12/19/2020	96.98	106.29	133.47	167.39
12/21/2019					12/20/2020	50.46	55.61	79.57	130.80
12/22/2019					12/21/2020	31.08	35.33	61.93	140.66
12/23/2019					12/22/2020	24.08	27.42	49.70	121.42
12/24/2019					12/23/2020	25.45	29.24	54.84	137.20

12/25/2019					12/24/2020	27.81	31.99	57.94	127.54
12/26/2019					12/25/2020	44.04	48.65	73.19	143.45
12/27/2019					12/26/2020	50.91	56.12	79.55	120.12
12/28/2019					12/27/2020	49.84	55.46	83.77	151.04
12/29/2019					12/28/2020	51.19	56.05	79.32	133.08
12/30/2019					12/29/2020	51.89	56.90	80.83	136.42
12/31/2019					12/30/2020	47.59	52.13	74.20	124.92
					12/31/2020	41.68	46.43	72.80	136.40