

Project Component 1

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Introduction

TBA

Data Description

The data contains six air pollution parameters like PM2.5, PM10, NO2, NH3, SO2, Ozone for 15 stations in New Delhi, collected from CPCB website from 08-02-2018 to 02-01-2021 on daily basis.

```
# Importing libraries
```

```
library(tidyverse)
```

```
library(dplyr)
```

```
library(sf)
```

```
library(mapview)
```

```
library(ggplot2)
```

```
library(TSstudio)
```

```
# Reading the data into data frame
```

```
df <- read.csv("delhi.csv")
```

```
head(df)
```

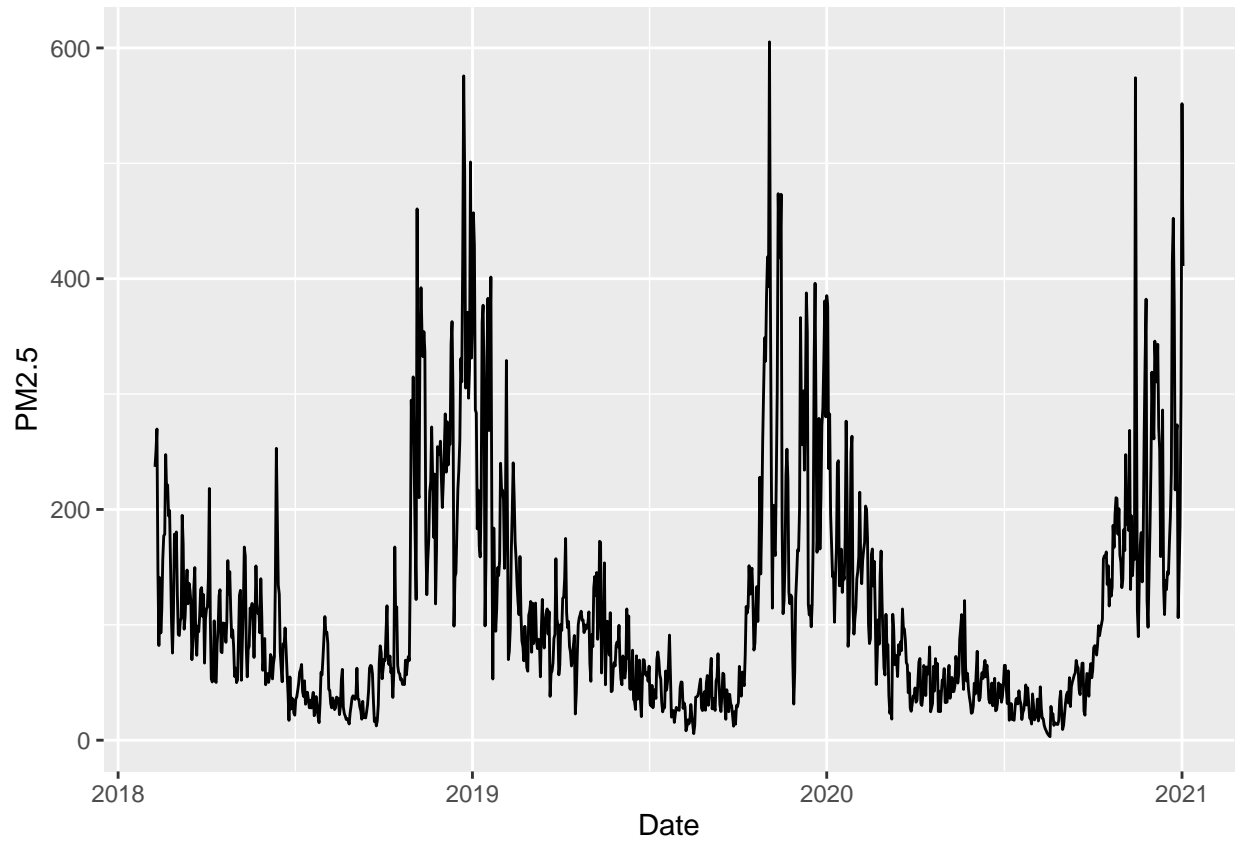
##	Id	siteName	siteCode	Date	PM2.5	PM10	NO2	NH3	SO2	Ozone
## 1	0	Ashok Vihar	1420	2018-02-08	236.96	405.79	109.97	31.45	11.20	33.42
## 2	1	Ashok Vihar	1420	2018-02-09	250.46	423.21	79.40	33.55	13.24	39.28
## 3	2	Ashok Vihar	1420	2018-02-10	269.71	498.88	183.86	22.66	7.16	44.46
## 4	3	Ashok Vihar	1420	2018-02-11	146.42	315.46	41.84	36.72	8.38	42.96
## 5	4	Ashok Vihar	1420	2018-02-12	82.08	199.92	23.24	34.80	4.43	37.89
## 6	5	Ashok Vihar	1420	2018-02-13	140.83	223.67	35.81	42.94	6.75	42.24

```
df$Date <- as.Date(df$Date)
```

```
head(df)
```

##	Id	siteName	siteCode	Date	PM2.5	PM10	NO2	NH3	SO2	Ozone
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## 6	5	Ashok Vihar	1420	2018-02-13	140.83	223.67	35.81	42.94	6.75	42.24

```
p <- ggplot(df[df$siteCode==1420,], aes(x=Date, y=PM2.5)) +  
  geom_line()  
p + scale_x_date(date_labels = "%Y")
```



```
# ts_plot(subset(df,siteCode==1420,select=c('Date','PM2.5')))
```

Exploratory Data Analysis

Results

Conclusion