R4EnvChem Project Template

John Q. Public

14/07/2021

Background

This is an example rmarkdown document you can use to complete the *R4EnvChem* Tutorial. It showcases some important `rmarkdown` features. Assuming you've downloaded the entire *R4EnvChem* project template, and downloaded the packages listed in Section 5, it should work out of the box.

Figure 1: Glorious downtown Toronto

Importing data

```
library(tidyverse)

airData <- read_csv(file = "data/2018-07-01_60430_Toronto_ON.csv")
head(airData)
```

```
## # A tibble: 6 x 8
##    naps city    p     latitude longitude date.time           pollutant
##   <dbl> <chr>   <chr>    <dbl>     <dbl> <dttm>              <chr>
## 1 60430 Toronto ON        43.7     -79.5 2018-07-01 00:00:00 O3
## 2 60430 Toronto ON        43.7     -79.5 2018-07-01 00:00:00 NO2
## 3 60430 Toronto ON        43.7     -79.5 2018-07-01 00:00:00 SO2
## 4 60430 Toronto ON        43.7     -79.5 2018-07-01 01:00:00 O3
```

```
## 5 60430 Toronto ON        43.7     -79.5 2018-07-01 01:00:00 NO2
## 6 60430 Toronto ON        43.7     -79.5 2018-07-01 01:00:00 SO2
## # ... with 1 more variable: concentration <dbl>
```

Visualizing data

```
ggplot(data = airData,
       aes(x = date.time,
           y = concentration,
           colour = pollutant)) +
  geom_line()
```

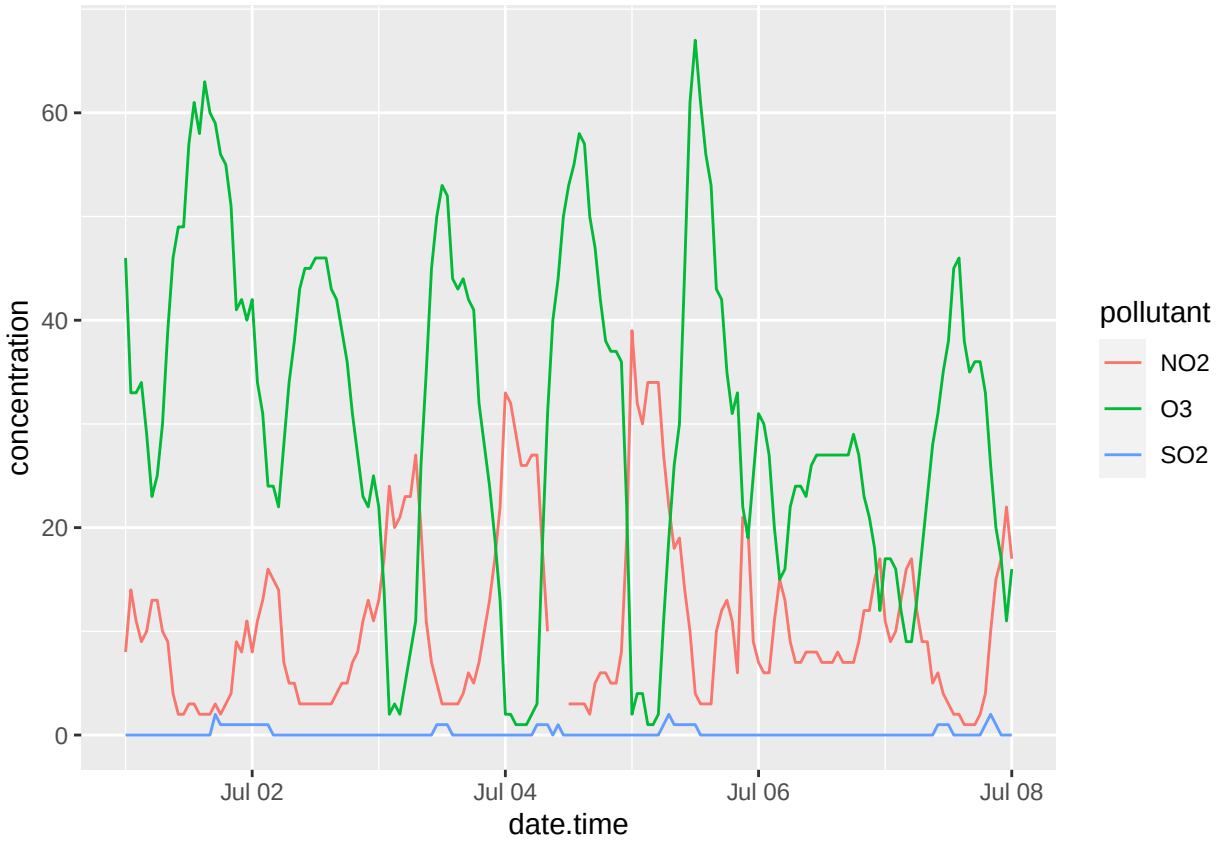

Figure 2: Time series plot of ambiant airborn pollutant concentrations measured by downtown Toronto NAPS station 60430

```
# Try and make another type of visualization with your data (i.e. box plot, violin plot)
# or enhance the default geom_line plot (i.e. marginal histograms, aesthetic changes)
```