

Lab 9

David Stenning

```
library(tidyverse)
library(forcats)
library(lubridate)
yvr <- read_csv("weatherYVR.csv")
yvr

## # A tibble: 365 x 20
##   `Date/Time`   Year Month   Day `Data Quality` `Max Temp` `Max Temp Flag`
##   <chr>         <dbl> <dbl> <dbl> <lgl>          <dbl> <lgl>
## 1 03-01-01      2003     1     1 NA              6.8 NA
## 2 03-01-02      2003     1     2 NA              11.7 NA
## 3 03-01-03      2003     1     3 NA              11.3 NA
## 4 03-01-04      2003     1     4 NA              13 NA
## 5 03-01-05      2003     1     5 NA              10.8 NA
## 6 03-01-06      2003     1     6 NA              9.9 NA
## 7 03-01-07      2003     1     7 NA              10.9 NA
## 8 03-01-08      2003     1     8 NA              7.7 NA
## 9 03-01-09      2003     1     9 NA              7.7 NA
## 10 03-01-10     2003     1    10 NA              5.8 NA
## # ... with 355 more rows, and 13 more variables: `Min Temp` <dbl>, `Min Temp
## #   Flag` <lgl>, `Mean Temp` <dbl>, `Mean Temp Flag` <lgl>, `Heat Deg
## #   Days` <dbl>, `Heat Deg Days Flag` <lgl>, `Cool Deg Days` <dbl>, `Cool Deg
## #   Days Flag` <lgl>, `Total Rain (mm)` <dbl>, `Total Rain Flag` <lgl>, `Total
## #   Snow (cm)` <dbl>, `Total Snow Flag` <lgl>, `Total Precip (mm)` <dbl>
```

In the above code chunk you read in **daily** weather data from YVR in 2003.

1. Coerce the `Date/Time` variable to a date object and rename it `Date`.
2. Make a time series plot (with lines) of the daily maximum temperature by day.
3. Change the `Month` variable from numeric to a factor. (Hint: The `month()` function with the `label=TRUE` will extract the months from a date-time object.)
4. Plot the average maximum temperature *versus* month. Then, redo this plot with months ordered by average maximum.