Climate Change Project

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Guide 1

Chunk 1

```
source("/home/mwl04747/RTricks/04_Regional_Climate_Trends/Guides/Guide1functions.R")
```

Chunk 2

```
my.state = "CA"
filename.csv <- "/home/mwl04747/RTricks/04_Regional_Climate_Trends/stations.active.oldest.csv"
my.inventory <- readInventory.fun(filename.csv, my.state)
```

Chunk 3

```
datapath = "/home/mwl04747/RTricks/04_Regional_Climate_Trends/Data/SP24/"
downloadStations.fun(datapath, my.inventory)
```

Guide 2

Chunk 1

```
source("/home/mwl04747/RTricks/04_Regional_Climate_Trends/Guides/Guide2functions.R")
```

Chunk 2

```
datafolder = "/home/mwl04747/RTricks/04_Regional_Climate_Trends/Data/SP24/"
ReadStations2.fun(datafolder)
```

Chunk 3

```
# sortstations.fun() Nor working yet.
```

Chunk 4

```
USC00042294a <- fixDates.fun(USC00042294)
```

Chunk 5

```
coverage.fun(USC00042294a)
```

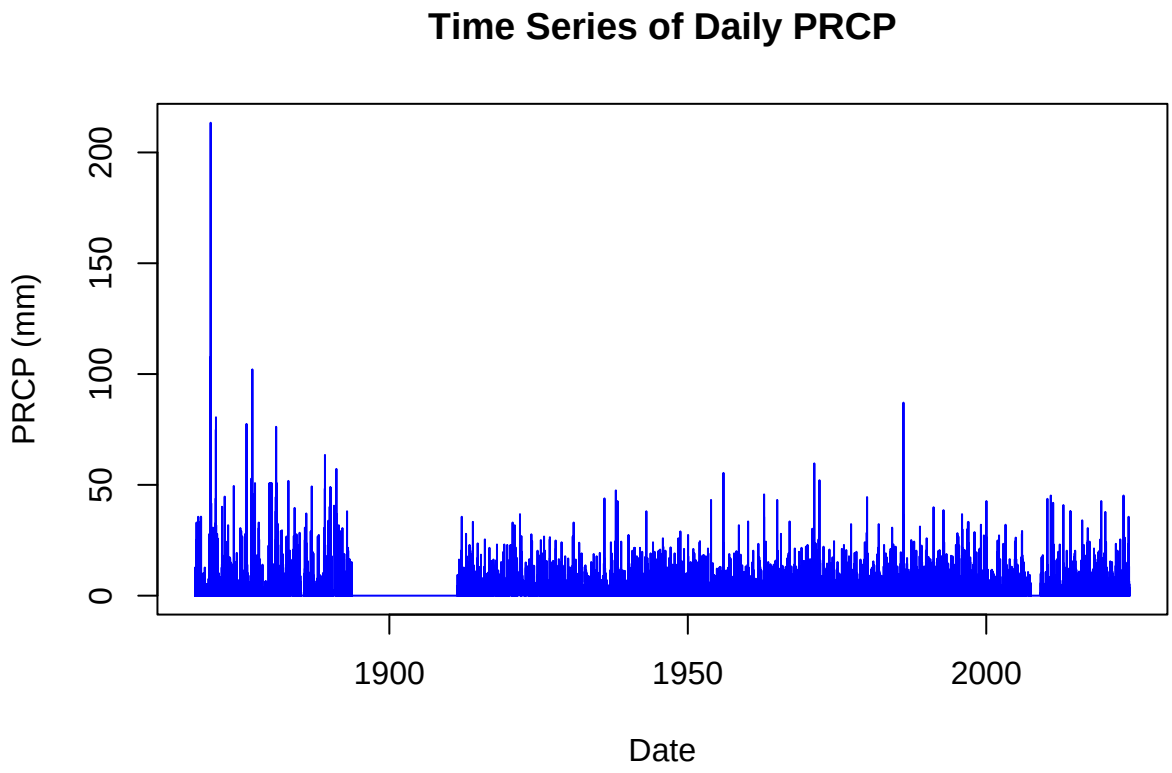
```
## [1] 86.33
```

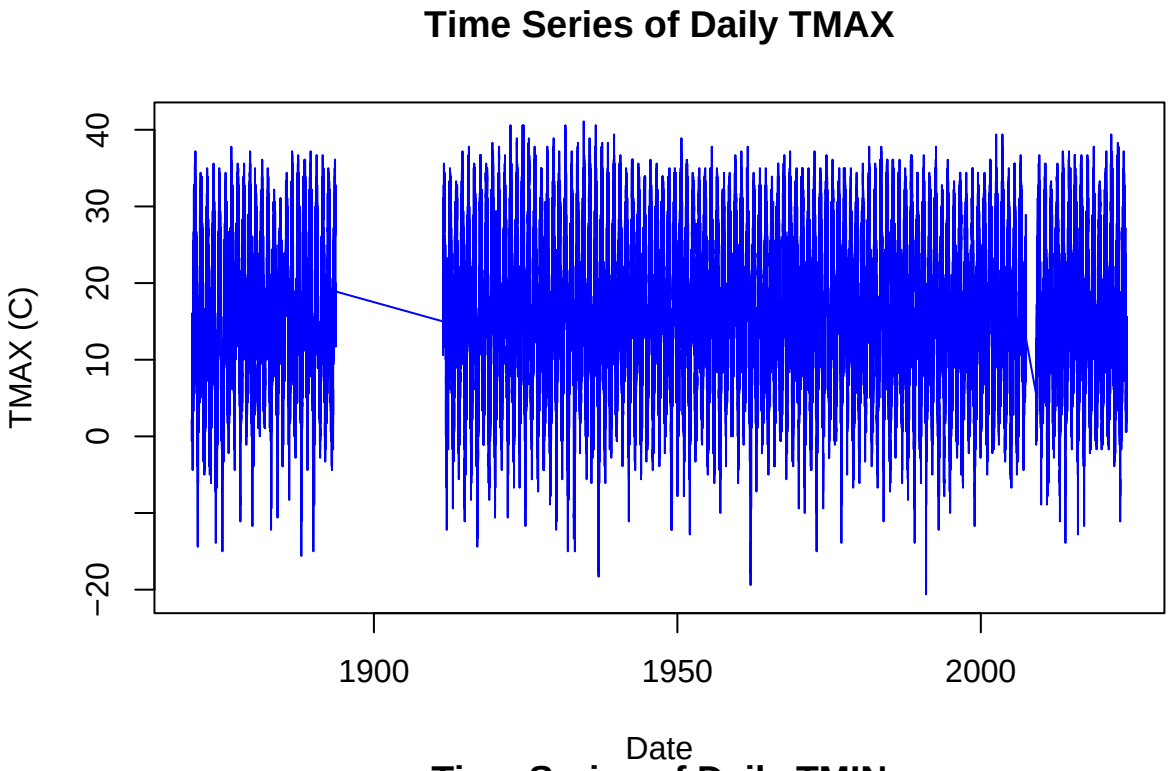
Chunk 6

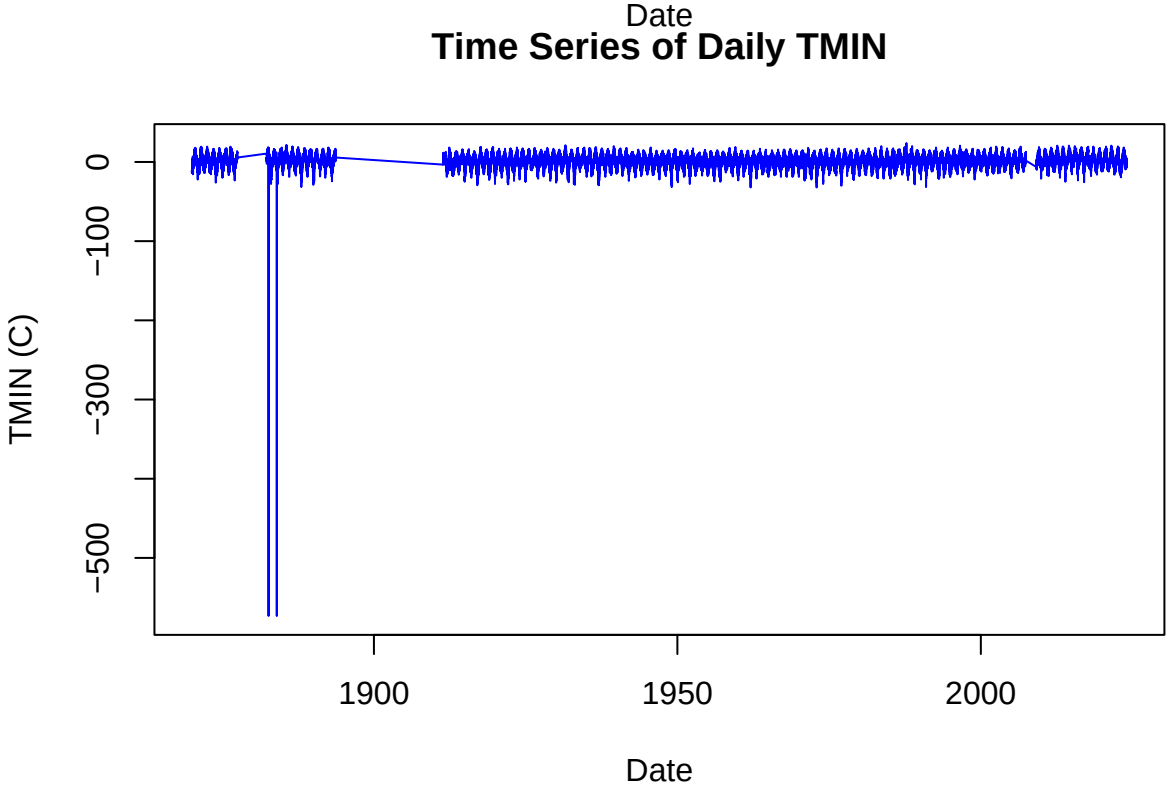
```
USC00042294b <- fixValues.fun(USC00042294a)
```

Chunk 7

```
QAQC.fun(USC00042294b)
```








```
##                  ID     DATE ELEMENT VALUE M.FLAG Q.FLAG S.FLAG OBS.TIME
## 147494 USC00043157 19821126    SNWD     0      P      I      0       NA
## 147655 USC00043157 19821226    SNOW     0      P      I      0       NA
## 158689 USC00043157 19880131    SNWD     0      P      I      0       NA
## 163246 USC00043157 19900205    SNWD     0      T      I      0       NA
##                Ymd MONTH YEAR
```

```
## 147494 1982-11-26    11 1982
## 147655 1982-12-26    12 1982
## 158689 1988-01-31     1 1988
## 163246 1990-02-05     2 1990
```

Chunk 8

```
USC00042294.monthly <- MonthlyValues.fun(USC00042294b)
USC00042294.normals <- MonthlyNormals.fun(USC00042294b)
```

Chunk 9

```
USC00042294.anamolies <- MonthlyAnamolies.fun(USC00042294.monthly, USC00042294.normals)
```

Guide 3

Chunk 1

```
source("/home/mwl04747/RTricks/04_Regional_Climate_Trends/Guides/Guide3functions.R")
```

```
## [1] "RData file found and loaded"
```

Chunk 2

```
USC00042294.trends <- monthlyTrend.fun(USC00042294.anamolies)
```

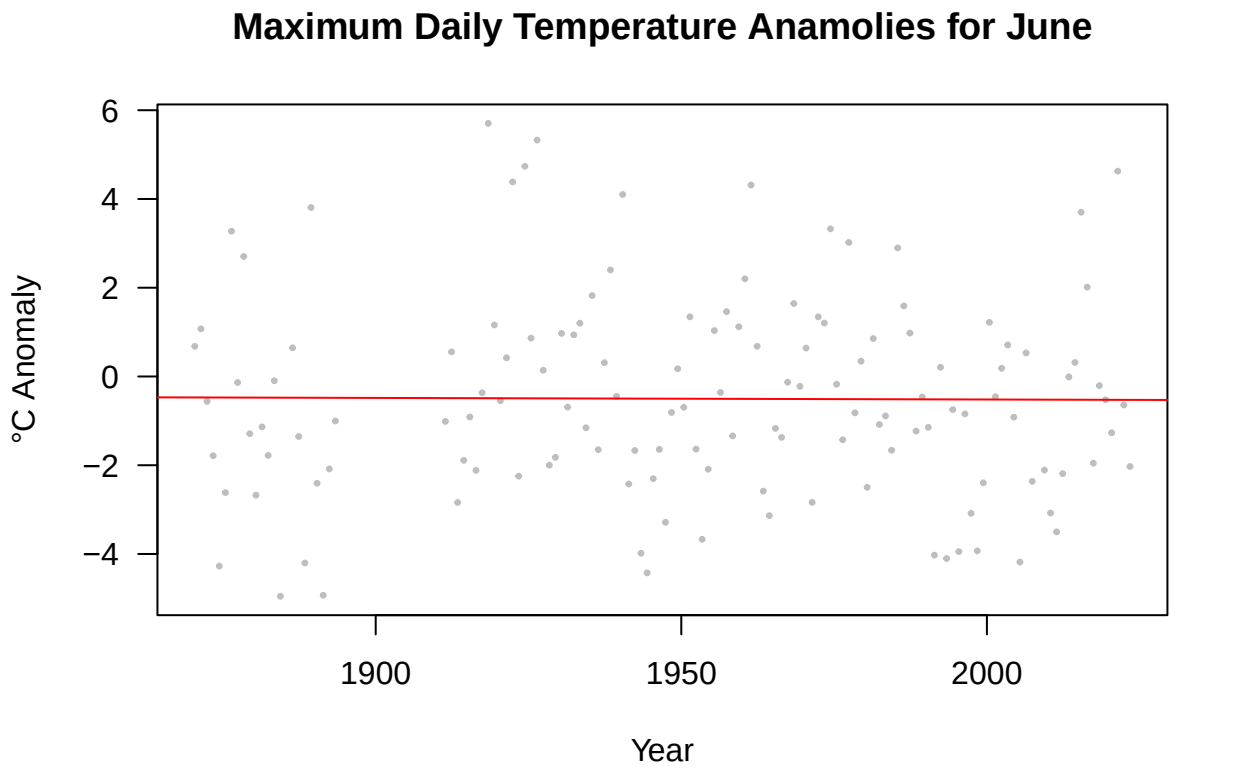
Chunk 3

Guide 4

Chunk 1

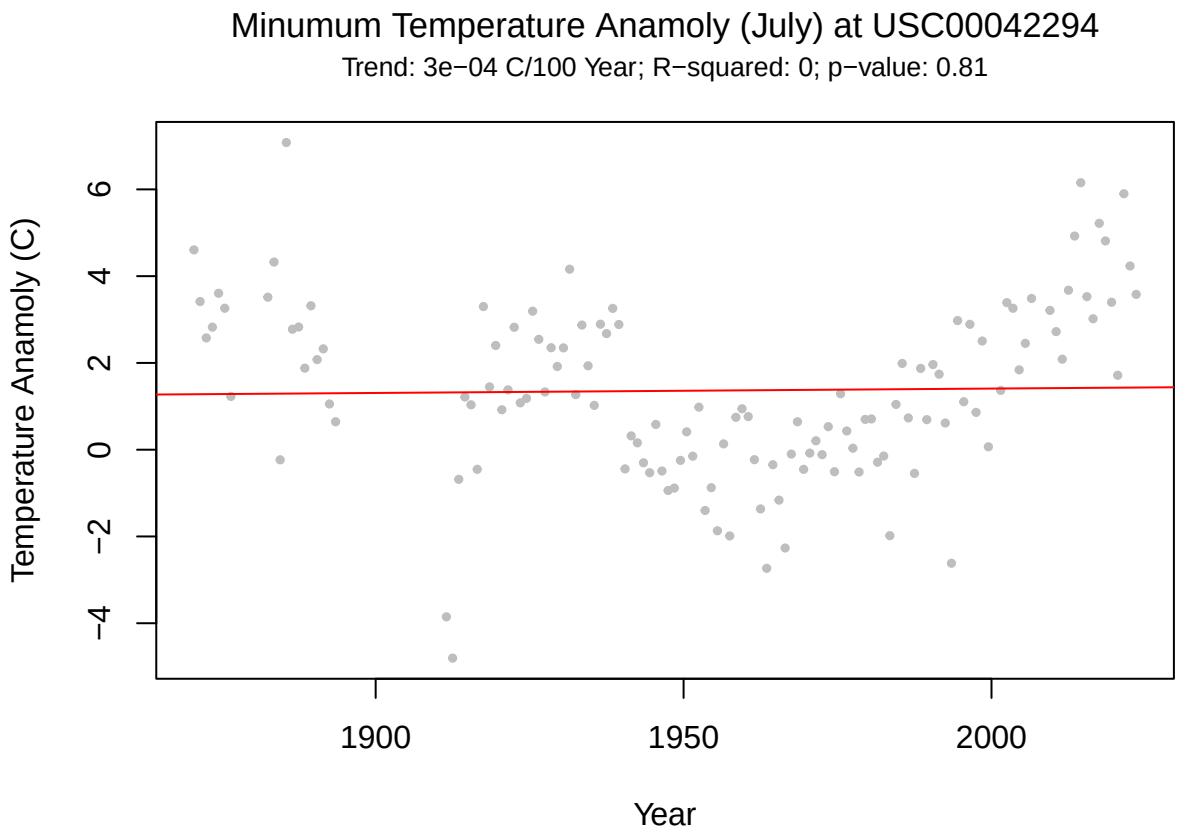
```
source("/home/mwl04747/RTricks/04_Regional_Climate_Trends/Guides/Guide4functions.R")
```

```
## [1] "RData file found and loaded"
```



Chunk 2

```
plotTrend.fun(USC00042294.anamolies, "TMIN", 7)
```


Minumum Temperature Anamoly (July) at USC00042294
Trend: 3e−04 C/100 Year; R−squared: 0; p−value: 0.81
Temperature Anamoly (C)
6
4
2
0
−2
−4
1900
1950
2000
Year

almost done!