

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 = "RI"  
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(USW00014765)
```

Chunk 5

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

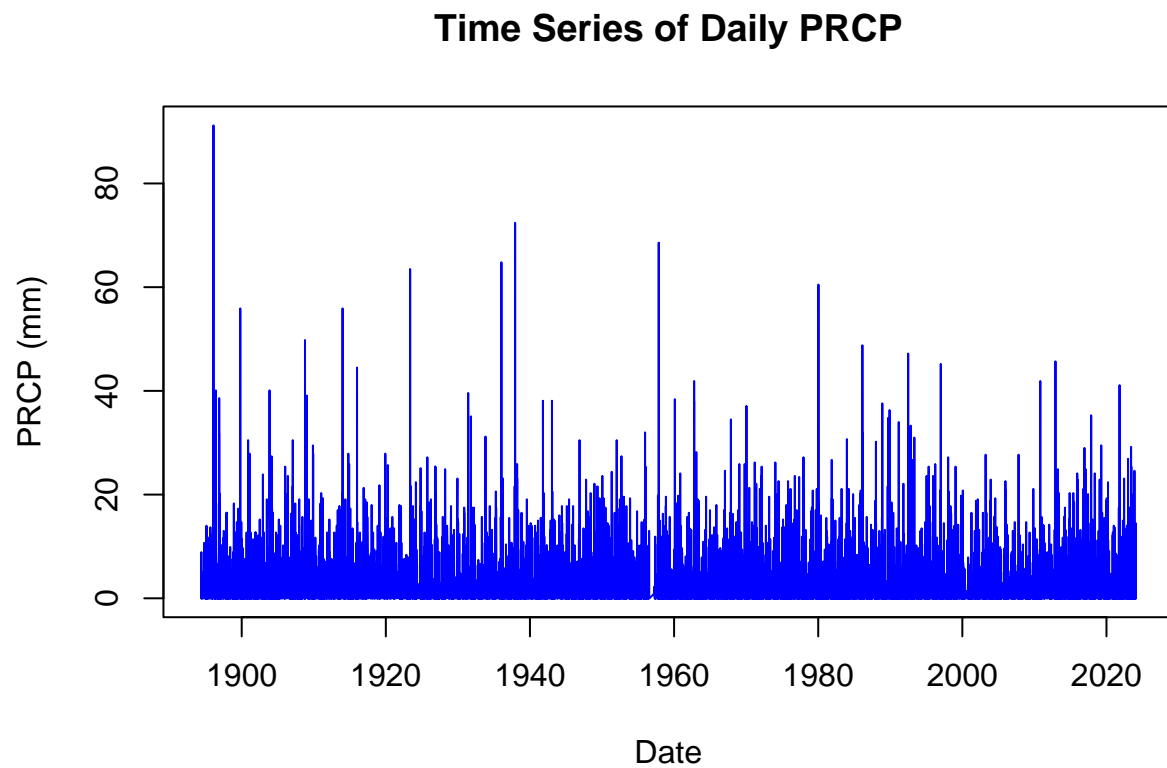
```
## [1] 98.21
```

Chunk 6

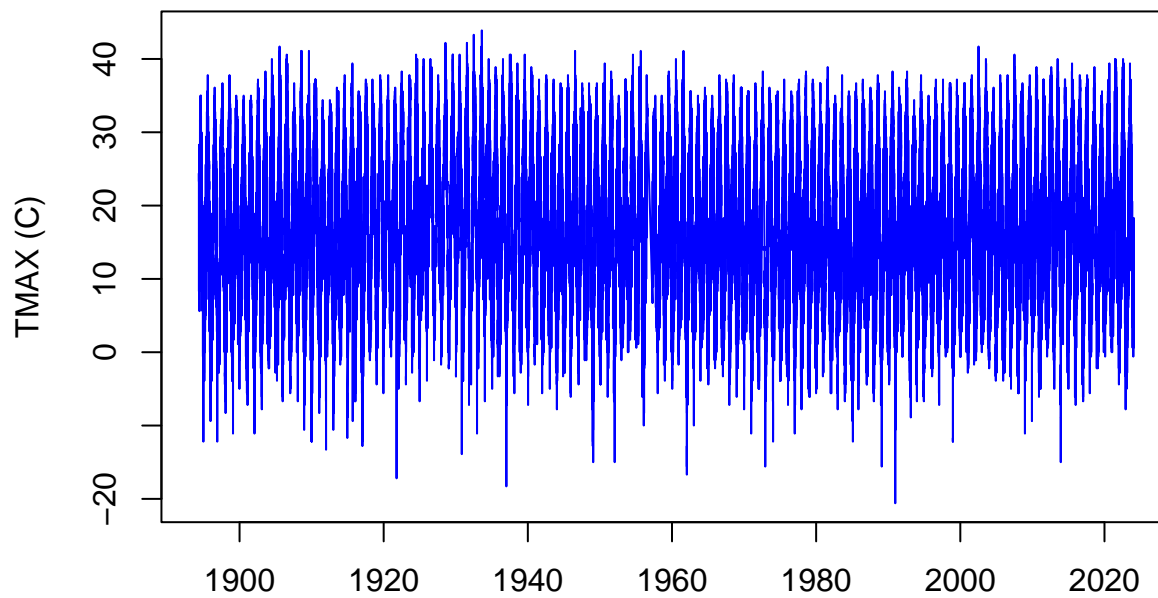
```
USC00042294b <- fixValues.fun(USC00042294a)
```

Chunk 7

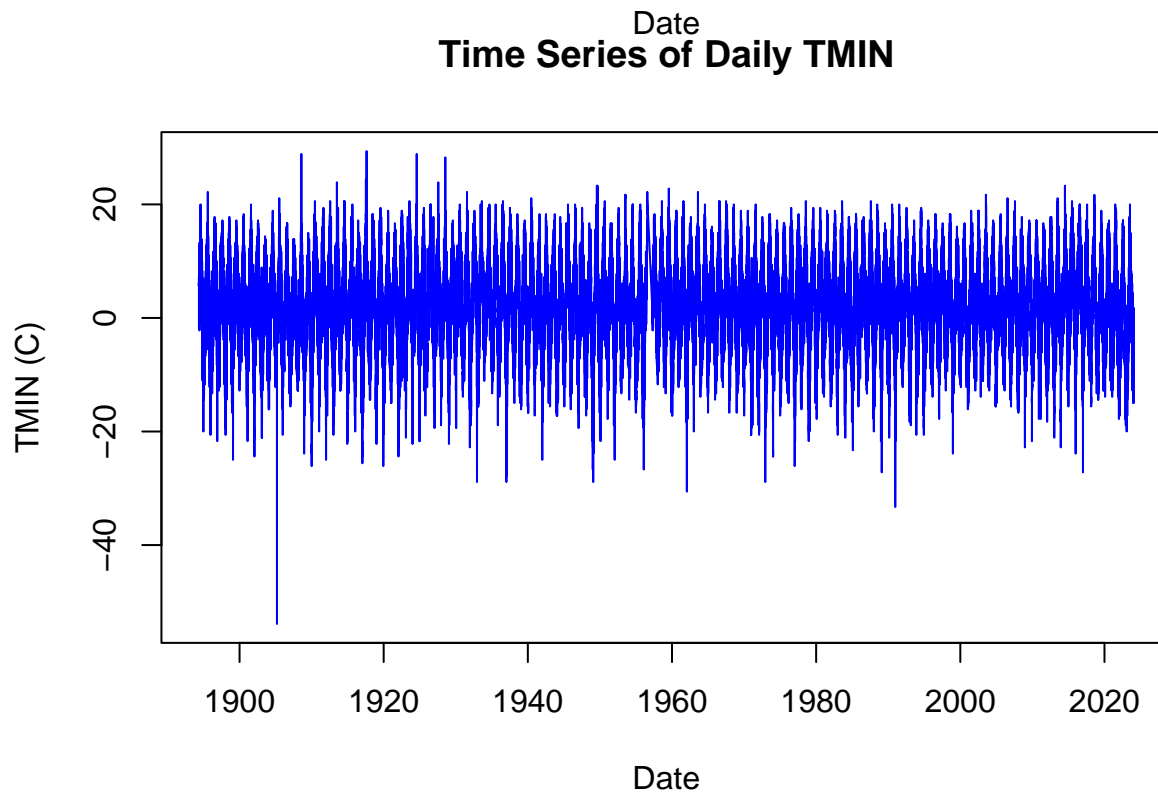
```
QAQC.fun(USC00042294b)
```



Time Series of Daily TMAX



Time Series of Daily TMIN



##	ID	DATE	ELEMENT	VALUE	M.FLAG	Q.FLAG	S.FLAG	OBS.TIME
## 66974	USC00041614	19491218	PRCP	0	P	L	6	800
## 199326	USC00041614	20151219	PRCP	0	T	L	7	700
##	Ymd	MONTH	YEAR					
## 66974	1949-12-18	12	1949					
## 199326	2015-12-19	12	2015					

Chunk 8

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

Chunk 9

```
USC00042294.anomalies <- MonthlyAnomalies.fun(USC00042294.monthly, USC00042294.normals)
```

Guide 3

Chunk 1

You might see a note about file not found, this is for Marc, you can ignore.

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

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

Chunk 2

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

Chunk 3

Guide 4

Chunk 1

You might see a note about file not found, this is for Marc, you can ignore.

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

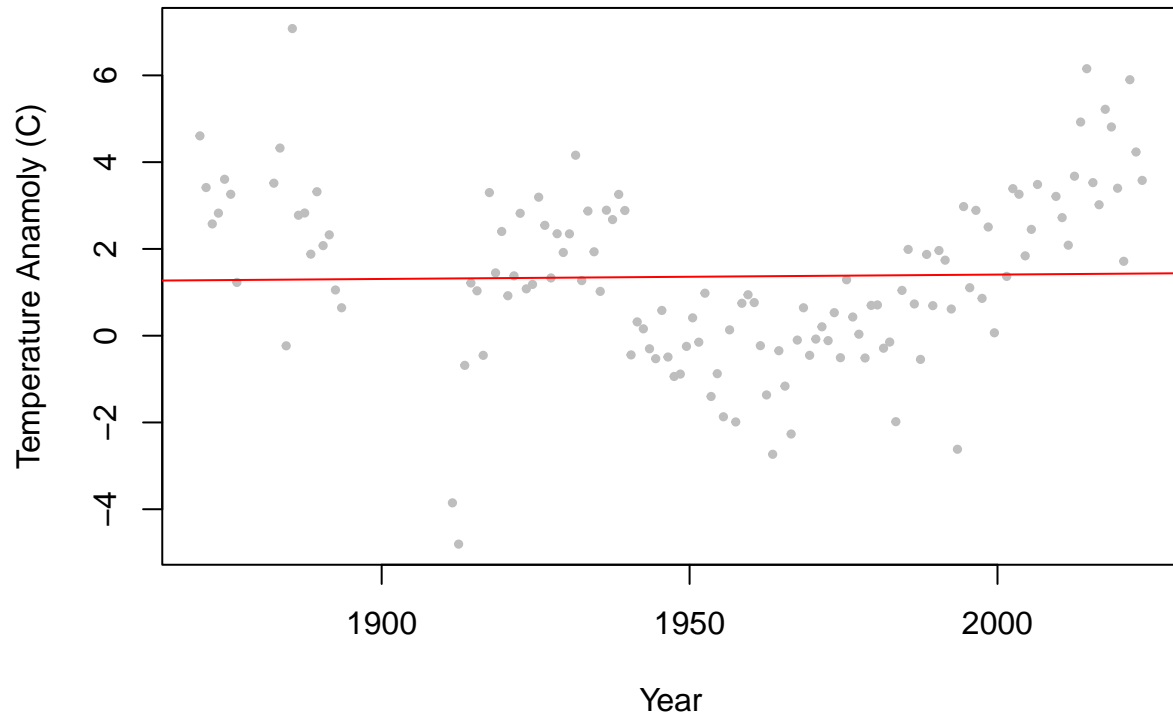
## [1] "RData file found and loaded"
```

Chunk 2

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

Minumum Temperature Anomaly (July) at USC00042294

Trend: $3\text{e-}04$ C/100 Year; R-squared: 0; p-value: 0.81



almost done!

Zip Files for Marc!

```
zip(zipfile = "/home/mwl04747/RTricks/04_Regional_Climate_Trends/Guides/Guidefunctions.zip",  
    files = c("/home/mwl04747/RTricks/04_Regional_Climate_Trends/Guides/Guide1functions.R",  
              "/home/mwl04747/RTricks/04_Regional_Climate_Trends/Guides/Guide2functions.R",  
              "/home/mwl04747/RTricks/04_Regional_Climate_Trends/Guides/Guide3functions.R",  
              "/home/mwl04747/RTricks/04_Regional_Climate_Trends/Guides/Guide4functions.R",  
              "/home/mwl04747/RTricks/04_Regional_Climate_Trends/Guides/MarcsTemplate.Rmd",  
              "/home/mwl04747/RTricks/04_Regional_Climate_Trends/stations.active.oldest.csv"),  
    flags= "-j")
```