

# 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)
```

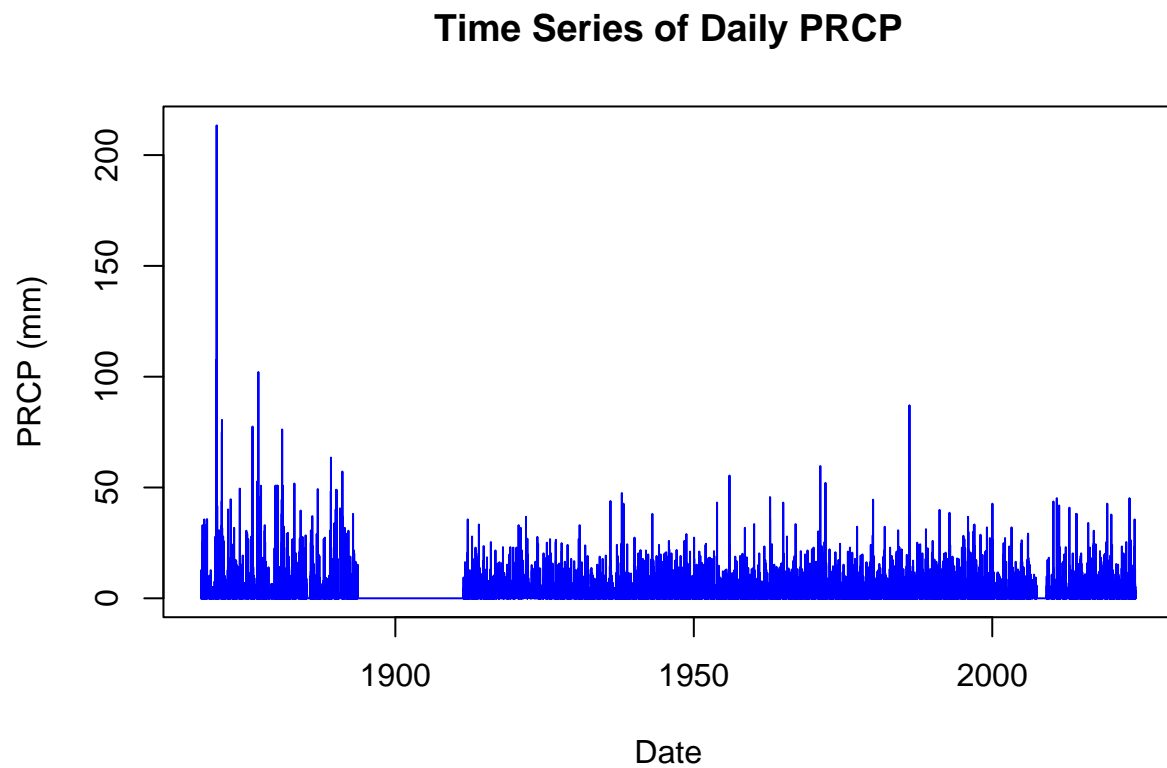
```
## [1] 86.33
```

### Chunk 6

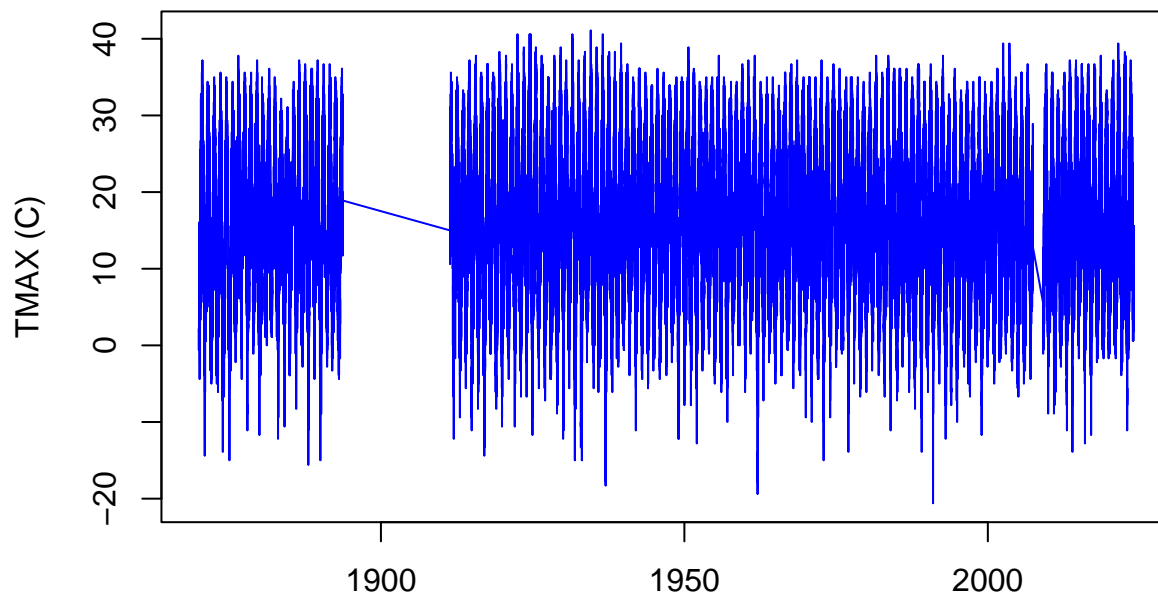
```
USC00042294b <- fixValues.fun(USC00042294a)
```

### Chunk 7

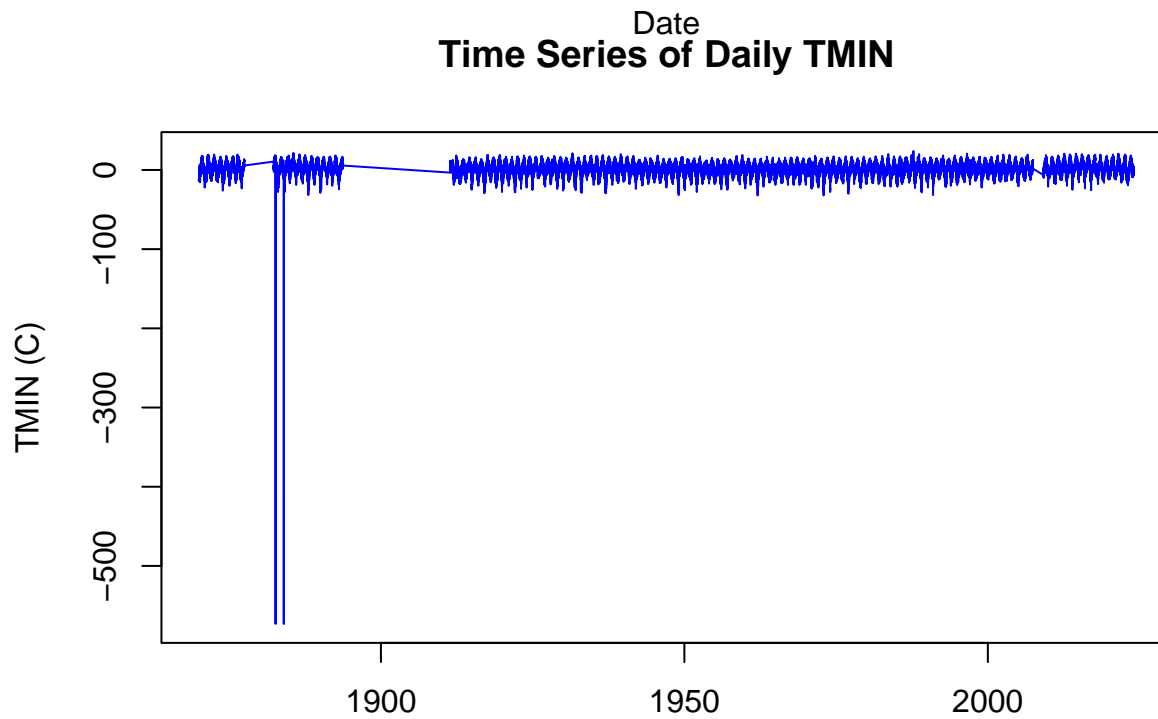
```
QAQC.fun(USC00042294b)
```



### Time Series of Daily TMAX



### Time Series of Daily TMIN



##	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.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")
```

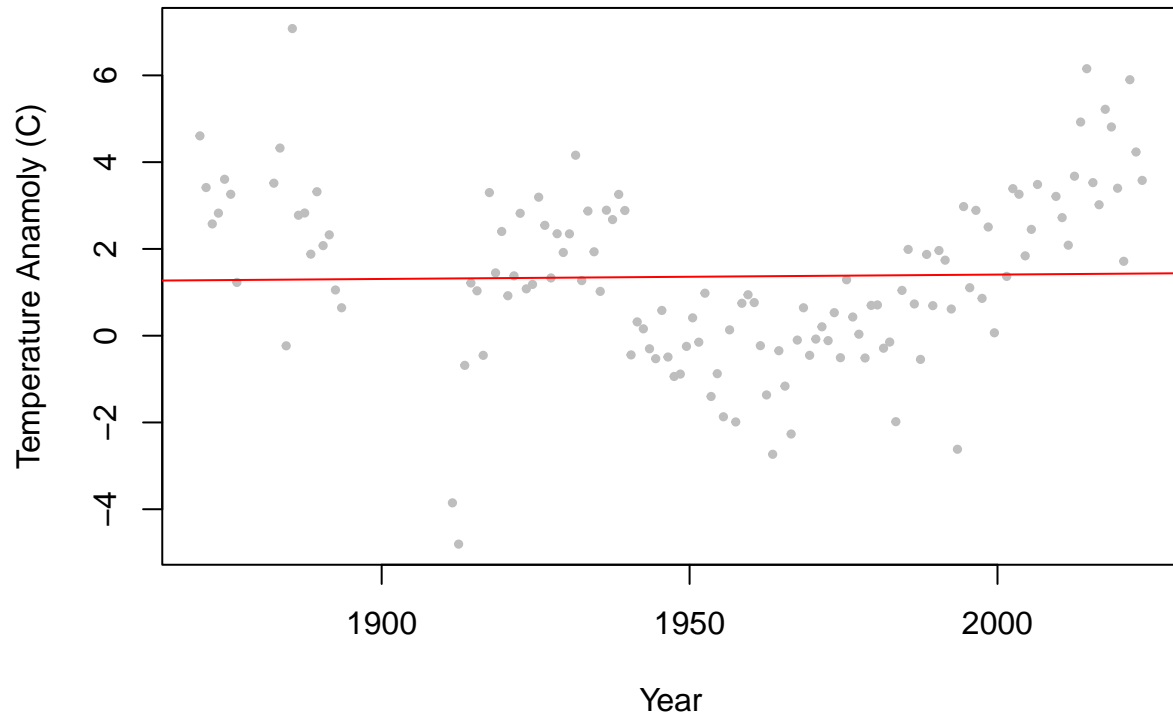
```
## [1] "RData file found and loaded"
```

## 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"))
```