Return Levels for De Bilt

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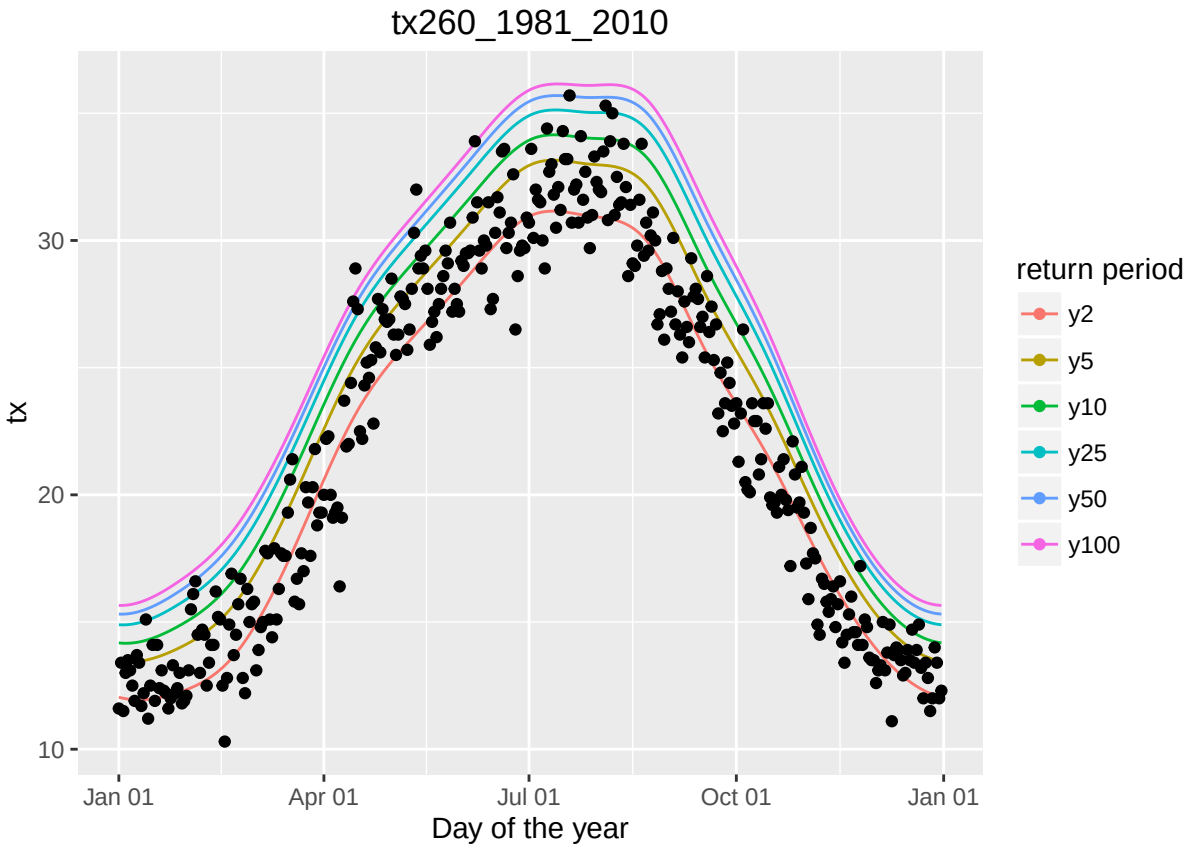
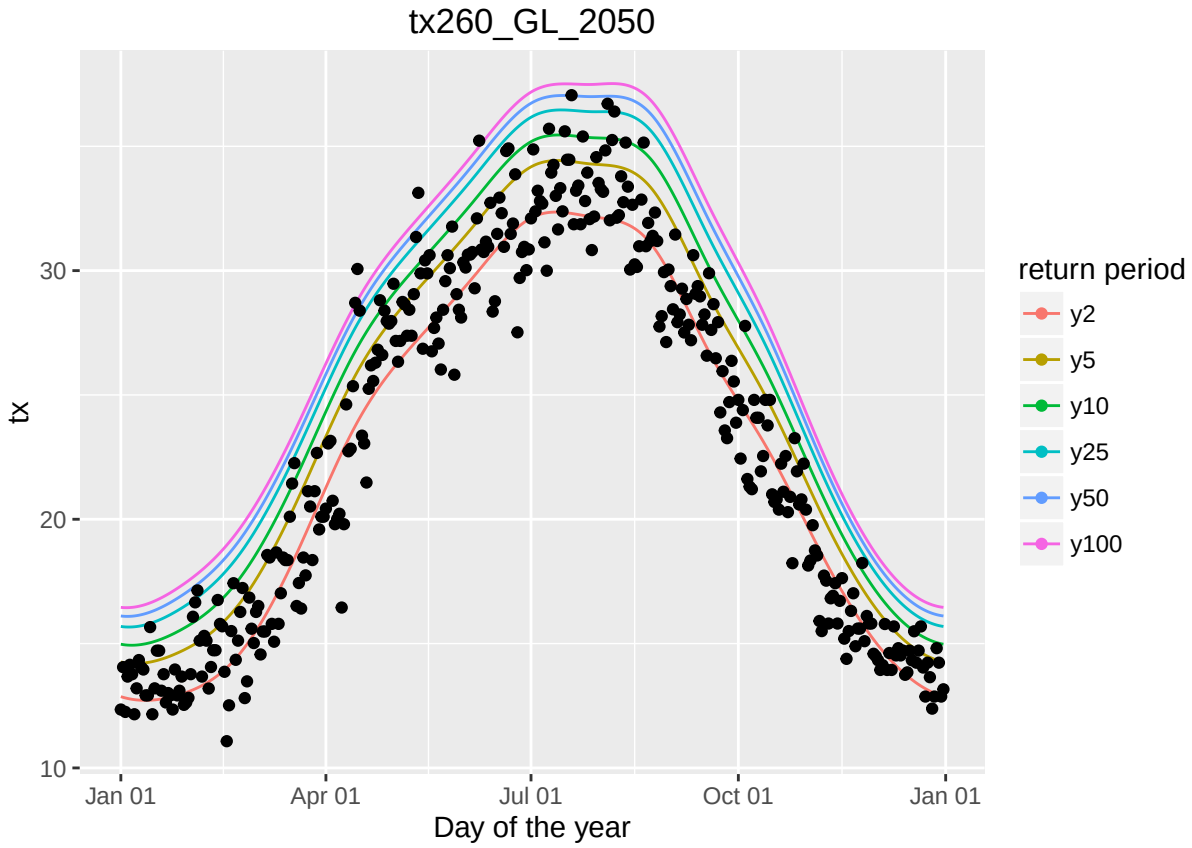
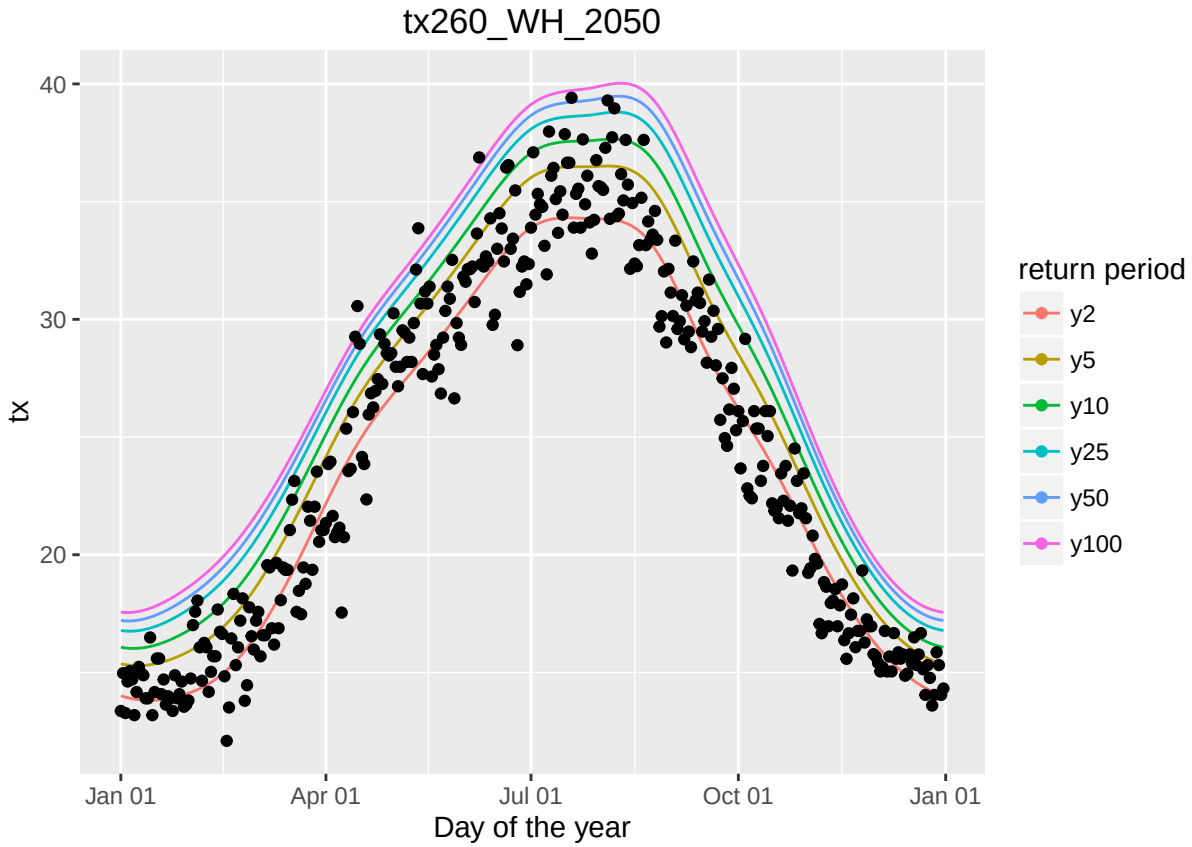
R Markdown

```
scenarios <- txDat[, unique(name)]
windowSize <- 20L

maxResult <- foreach(scenario = iter(scenarios), .combine = "rbind") %do% {
  maxDat <- txDat[name == scenario]
  tmp <- ReturnLevelClimatology(maxDat, "tx", "max",
                                windowSize = windowSize,
                                kLoc = 15, kScale = 8, kShape = 4)
  p <- PlotReturnLevels(tmp)
  print(p + ggtitle(paste(scenario)))
  tmp <- tmp$returnLevels
  tmp[, name := scenario]
}
```



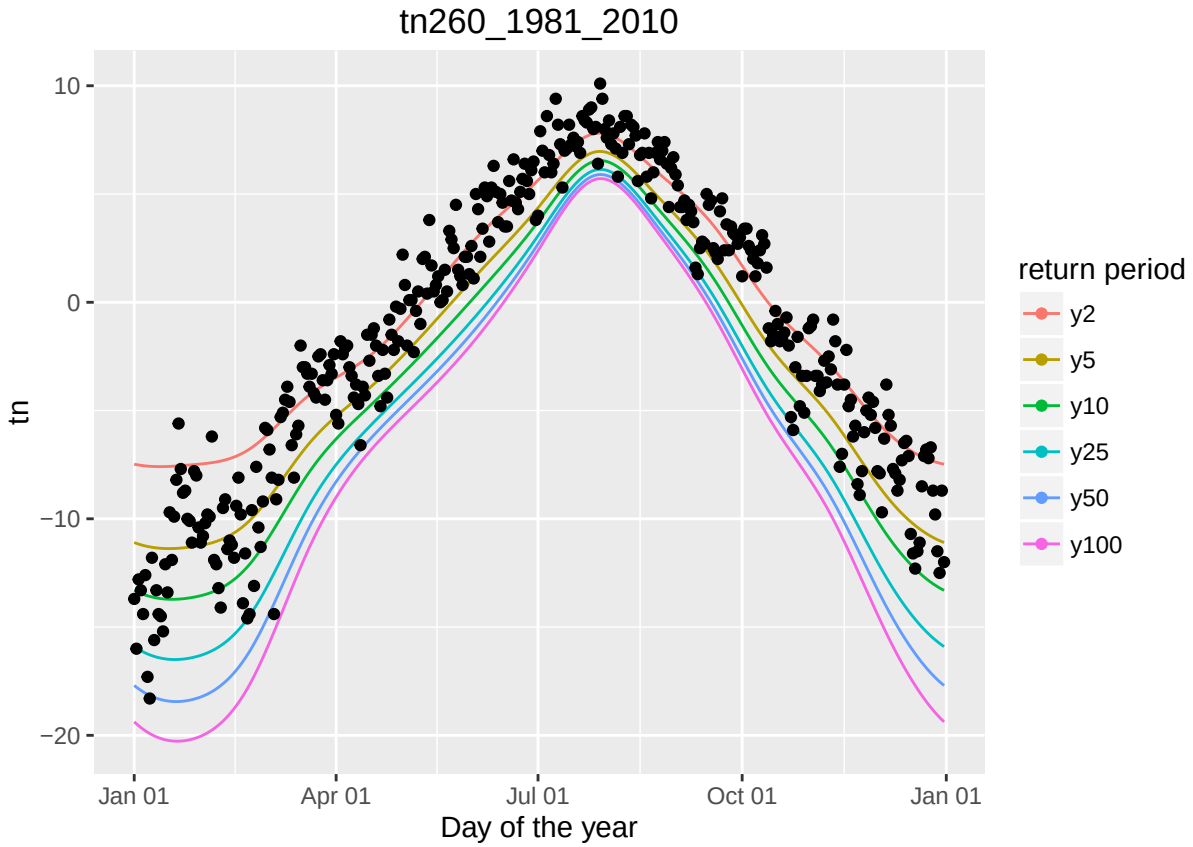

tx260_GL_2050
tx
30
20
10
Jan 01
Apr 01
Jul 01
Oct 01
Jan 01
Day of the year
return period
y2
y5
y10
y25
y50
y100

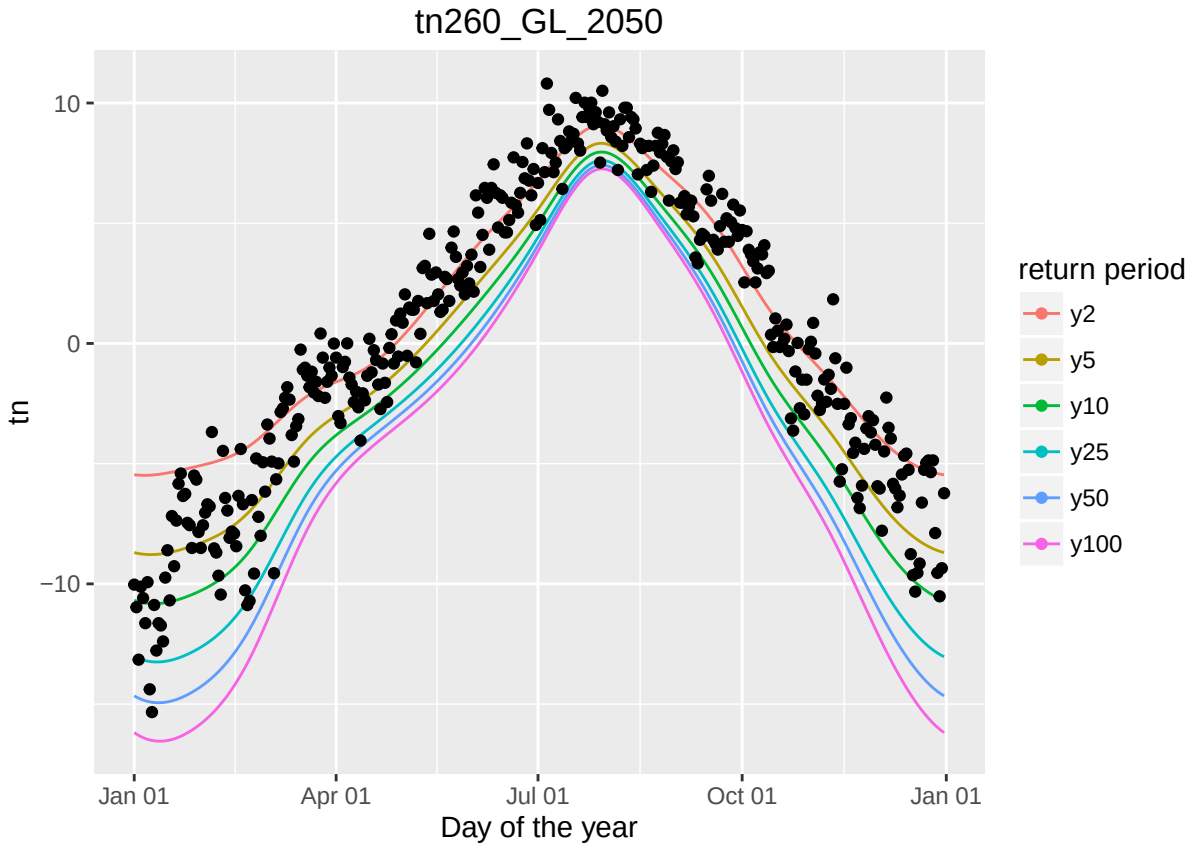

tx260_WH_2050
tx
40
30
20
Jan 01
Apr 01
Jul 01
Oct 01
Jan 01
Day of the year
return period
y2
y5
y10
y25
y50
y100

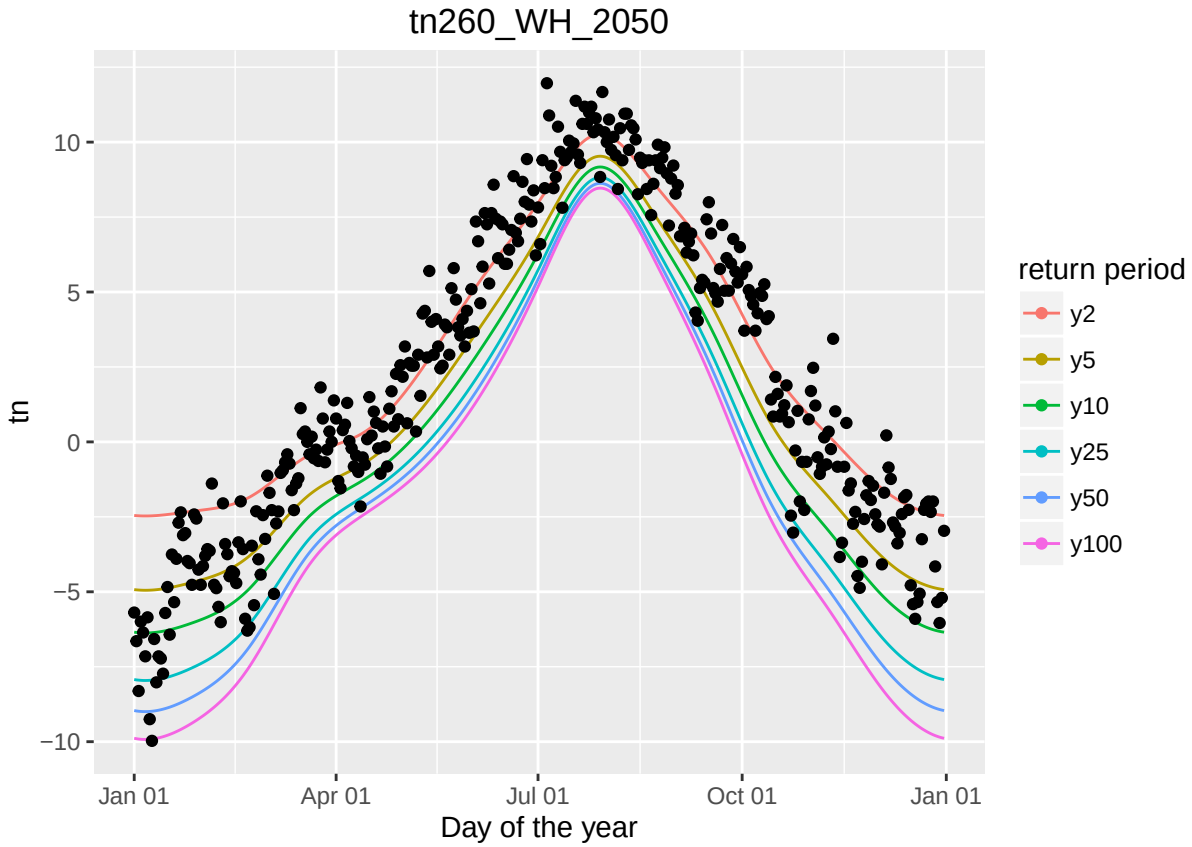
```
setcolorder(maxResult , c("name", "returnPeriod", "displayDate", "value"))
setkey(maxResult, name, returnPeriod, displayDate)
```

```
scenarios <- tnDat[, unique(name)]
windowSize <- 20L

minResult <- foreach(scenario = iter(scenarios), .combine = "rbind") %do% {
  minDat <- tnDat[name == scenario]
  tmp <- ReturnLevelClimatology(minDat, "tn", "min",
                                windowSize = windowSize,
                                kLoc = 15, kScale = 8, kShape = 4)
  p <- PlotReturnLevels(tmp)
  print(p + ggtitle(paste(scenario)))
  tmp <- tmp$returnLevels
  tmp[, name := scenario]
}
```




tn260_GL_2050
10
0
−10
tn
Jan 01
Apr 01
Jul 01
Oct 01
Jan 01
Day of the year
return period
y2
y5
y10
y25
y50
y100


tn260_WH_2050
10
5
0
−5
−10
tn
Jan 01
Apr 01
Jul 01
Oct 01
Jan 01
Day of the year
return period
y2
y5
y10
y25
y50
y100

```r
setcolorder(minResult , c("name", "returnPeriod", "displayDate", "value"))
setkey(minResult, name, returnPeriod, displayDate)
```

```r
write.csv(rbind(maxResult, minResult), file = "returnLevelsDeBilt.csv", row.names=FALSE)
```