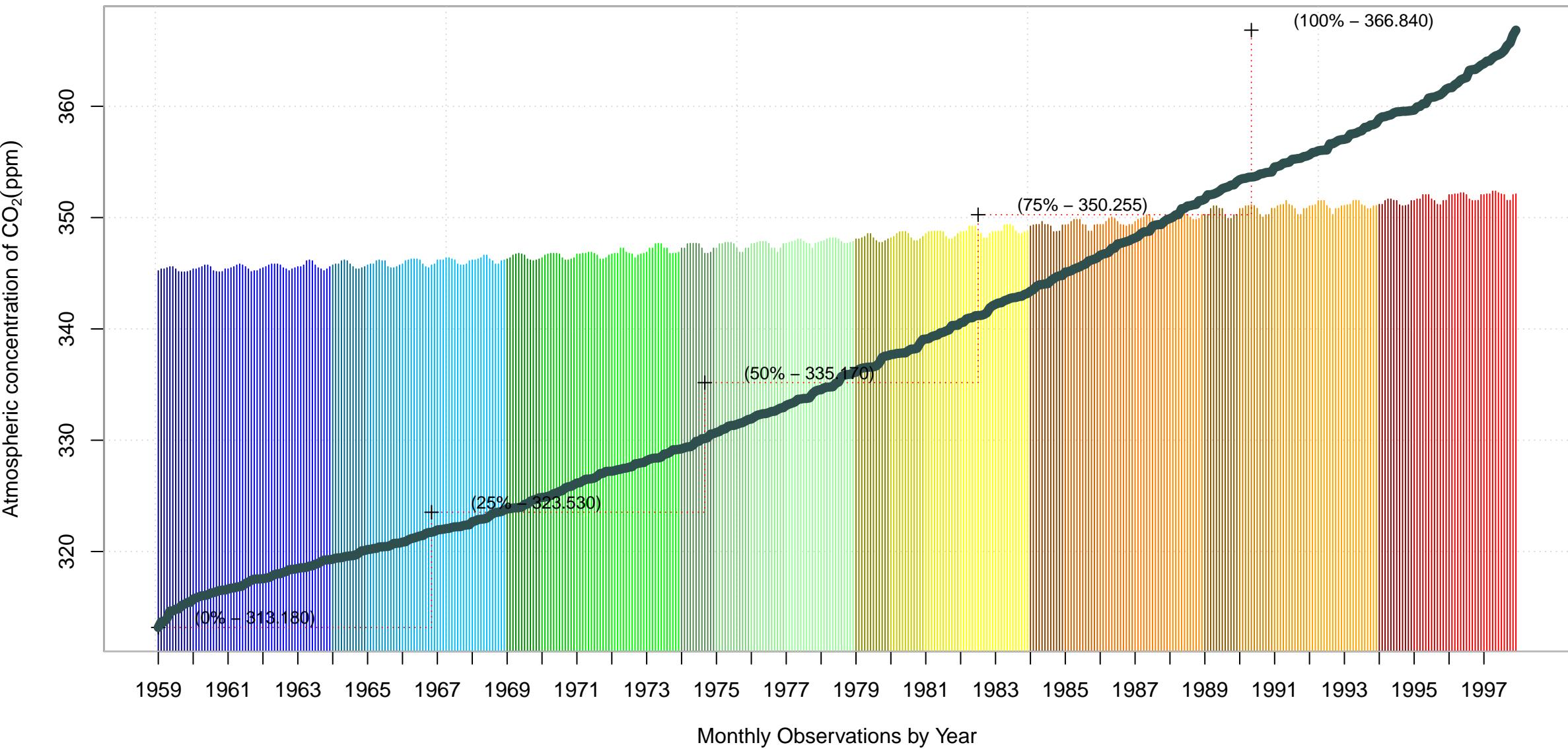


Rises in Mauna Loa Atmospheric CO₂ Concentration [1959 – 1997]



R – Source: Rises in Mauna Loa Atmospheric CO₂ Concentration [1959 - 1997]

```
x <- 1:468
y <- sort(co2)
a <- 0
b <- 12
yr <- 1959:1997
c_by_yr <- x[seq(1, length(x), 12)]
d <- quantile(y)
e <- x[seq(1, length(x), 94)]
f <- c(313.180, 323.530, 335.170, 350.255, 366.840)

plot(x, y, xaxt = "n", xlab = expression("Monthly Observations by Year"), ylab = expression("Atmospheric concentration of CO"[2] (ppm)), type='l', col='black', lwd=3)
axis(1, at=c_by_yr[1:39], labels=yr[1:39], srt=90)

grid()

for(j in 0:4){

  lines(x[a:b],y[co2[a:b]], col=colors()[(30-j):(30-j)], type='h')

  a <- 1 + b
  b <- b + 12
  yr <- 1 + j
}
```

```
for(k in 0:4){

  lines(x[a:b],y[co2[a:b]], col=colors()[(125-k):(125-k)], type='h')

  a <- 1 + b

  b <- b + 12

}

for(l in 0:4){

  lines(x[a:b],y[co2[a:b]], col=colors()[(258-l):(258-l)], type='h')

  a <- 1 + b

  b <- b + 12

}

for(m in 0:4){

  lines(x[a:b],y[co2[a:b]], col=colors()[(518-m):(518-m)], type='h')

  a <- 1 + b

  b <- b + 12

}

for(n in 0:4){

  lines(x[a:b],y[co2[a:b]], col=colors()[(656-n):(656-n)], type='h')
```

```
a <- 1 + b  
b <- b + 12  
}  
  
for(o in 0:4){  
  
  lines(x[a:b],y[co2[a:b]], col=colors()[(94-o):(94-o)], type='h')  
  a <- 1 + b  
  b <- b + 12  
}  
  
for(p in 0:4){  
  
  lines(x[a:b],y[co2[a:b]], col=colors()[(502-p):(502-p)], type='h')  
  a <- 1 + b  
  b <- b + 12  
}  
  
for(q in 0:4){  
  
  lines(x[a:b],y[co2[a:b]], col=colors()[(556-q):(556-q)], type='h')  
  a <- 1 + b  
  b <- b + 12  
}
```

```
points(e[1:6], d[1:6], col='red', type='s', lty=3)

points(e[1:6], d[1:6], col='black', pch=3)

lines(x[1:468], y[1:468], col='darkslategrey', type='l', lwd=7)

textxy(e, f, c('0% - 313.180)', '(25% - 323.530)', '(50% - 335.170)', '(75% - 350.255)', '(100% - 366.840)'),  
0.8, m = c(-10, 0), dcol='black')

box(col='grey')

title(main = "Rises in Mauna Loa Atmospheric CO2 Concentration [1959 - 1997]")
```