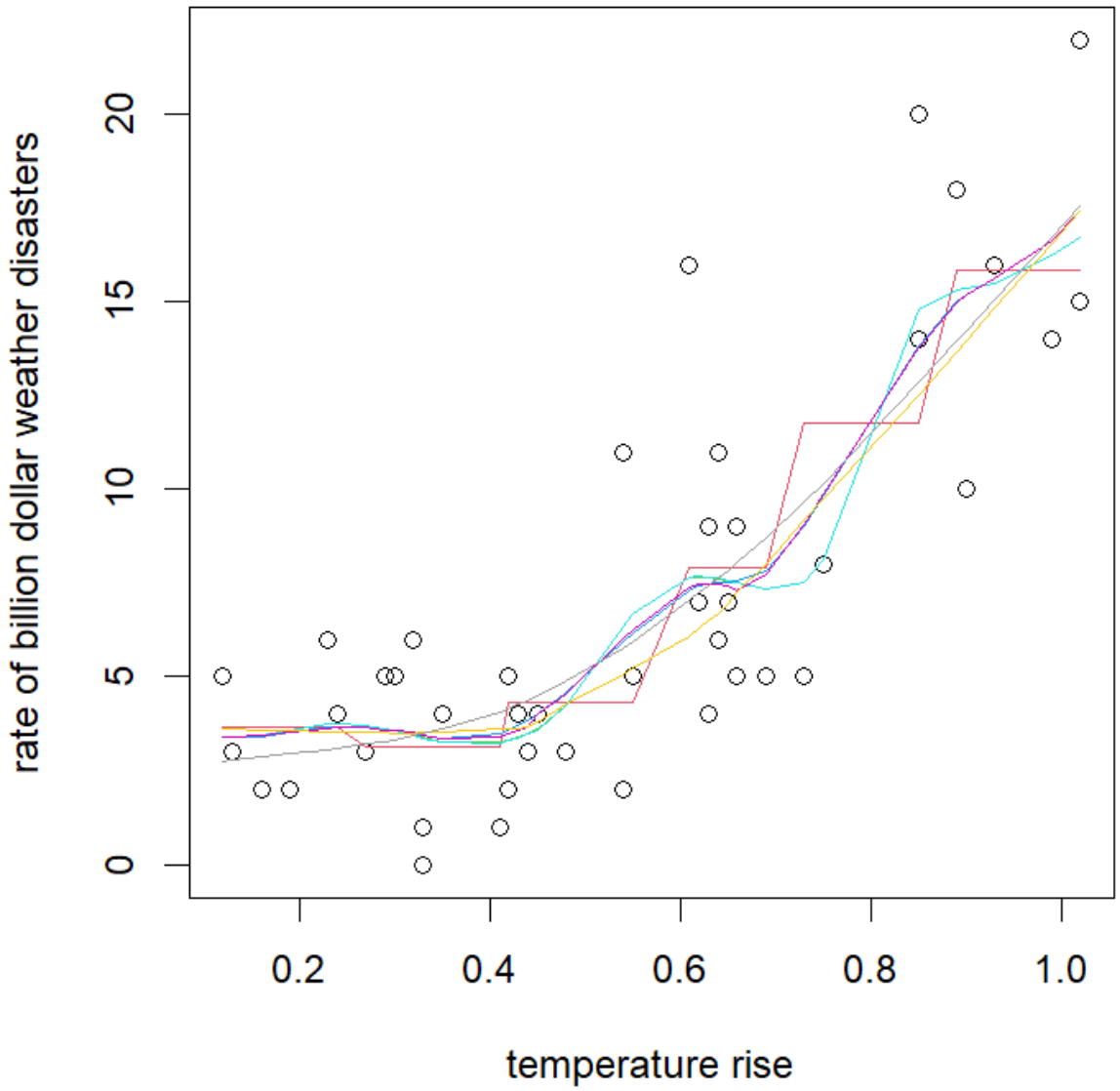
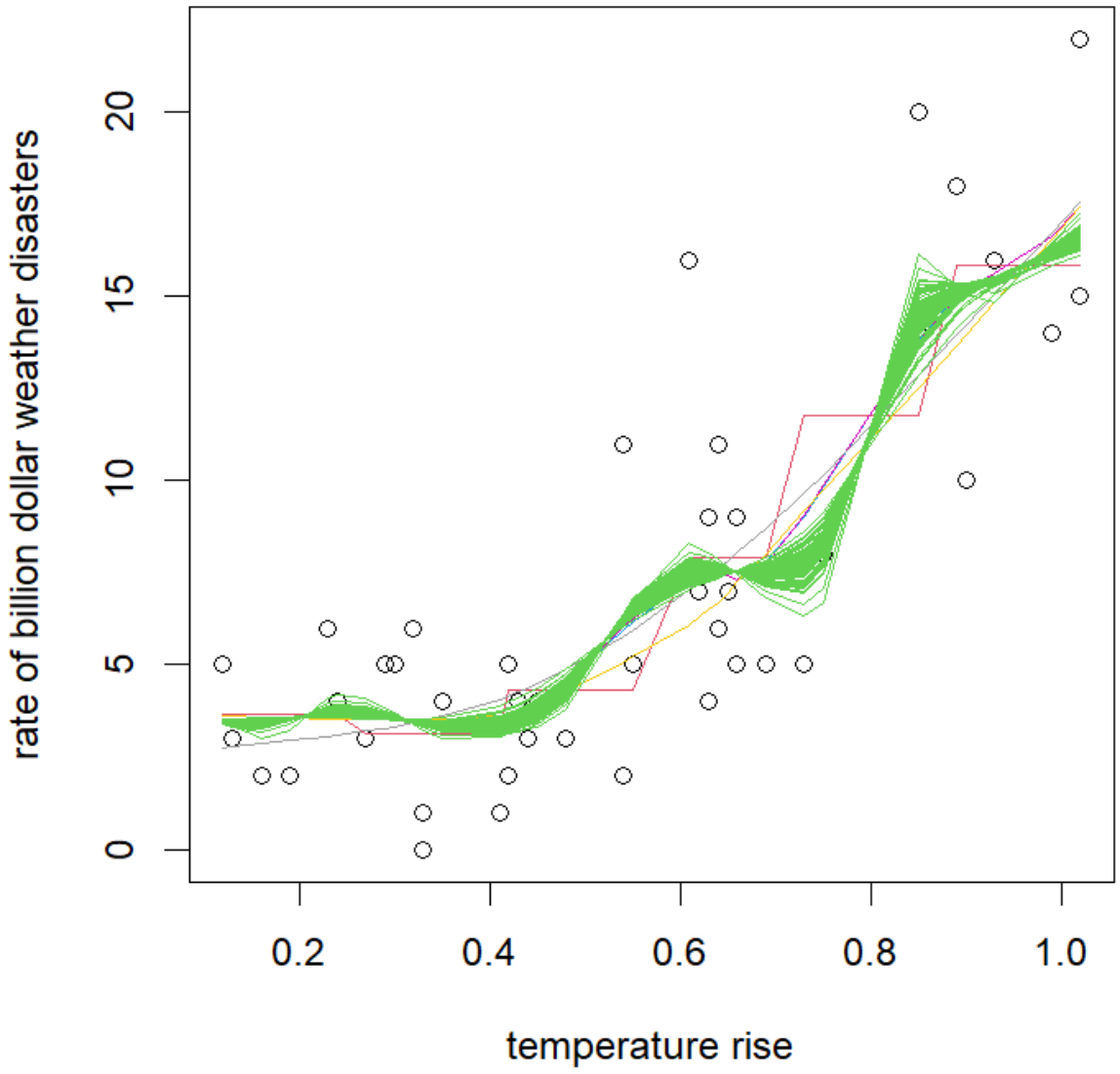
```
#Plotting NOAA.new data with the temperature rise on the x-axis and the rate of billion dollar
weather disasters on the y-axis
plot(NOAA[,3],NOAA[,2],xlab="temperature rise", ylab = "rate of billion dollar weather disasters")
#calculating means using above functions
dum <-bin.mean(NOAA[,3],NOAA[,2],6)
   dum <-gauss.mean(NOAA[,3],NOAA[,2],.063)
   dum <-gauss.reg(NOAA[,3],NOAA[,2],.078,do.plot=T)
   dum <-gauss.mean.trunc(NOAA[,3],NOAA[,2],.063,20,do.plot=T)
   dum <- gauss.reg.trunc(NOAA[,3],NOAA[,2],.08,17,do.plot=T)
#making smooth lines
   lines(lowess(NOAA[,3],NOAA[,2]),col=7)
   lines(smooth.spline(NOAA[,3],NOAA[,2]),col=8)
```

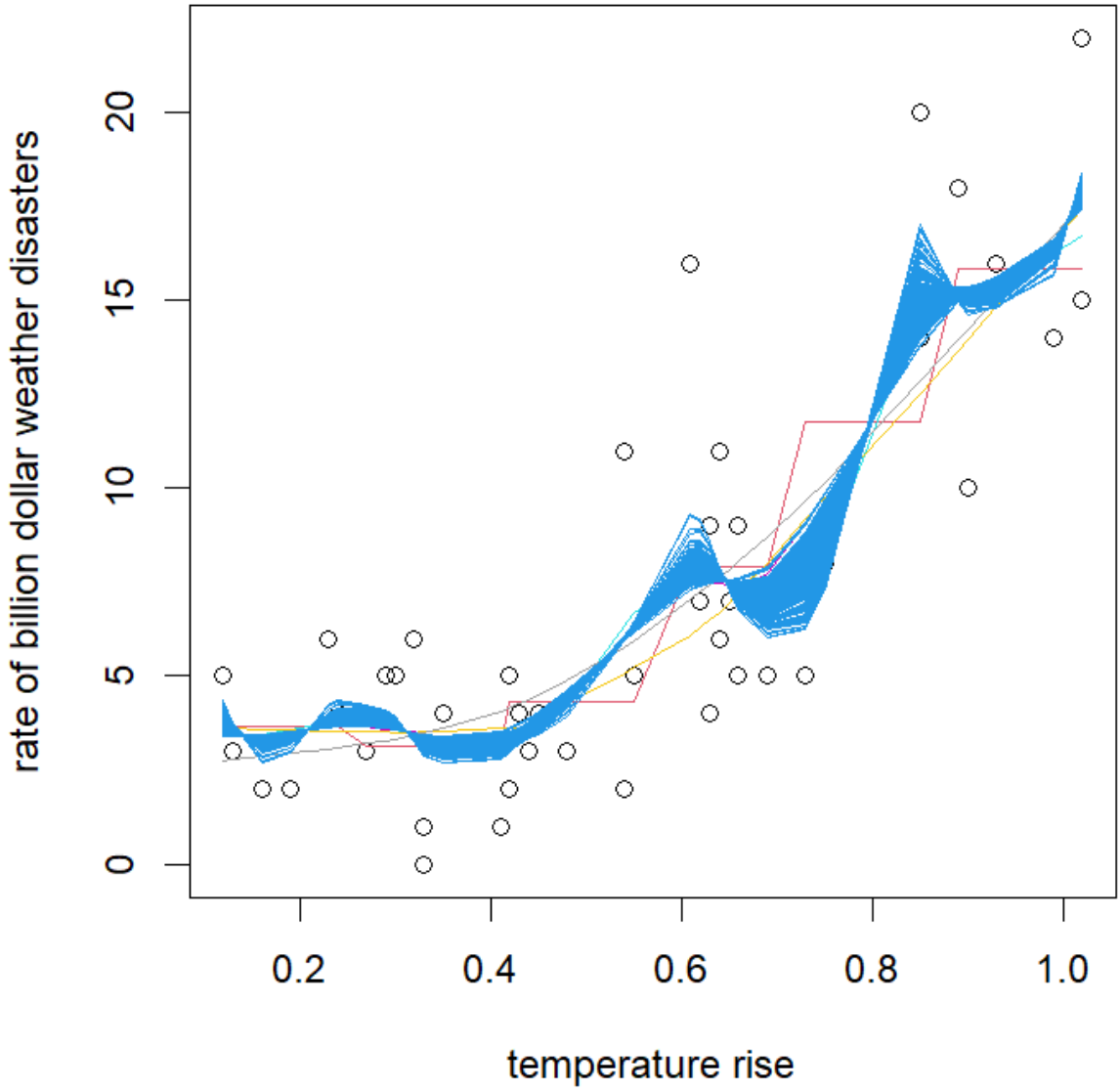


greedy.random.search(gauss.mean, NOAA, 3, 2, .063)



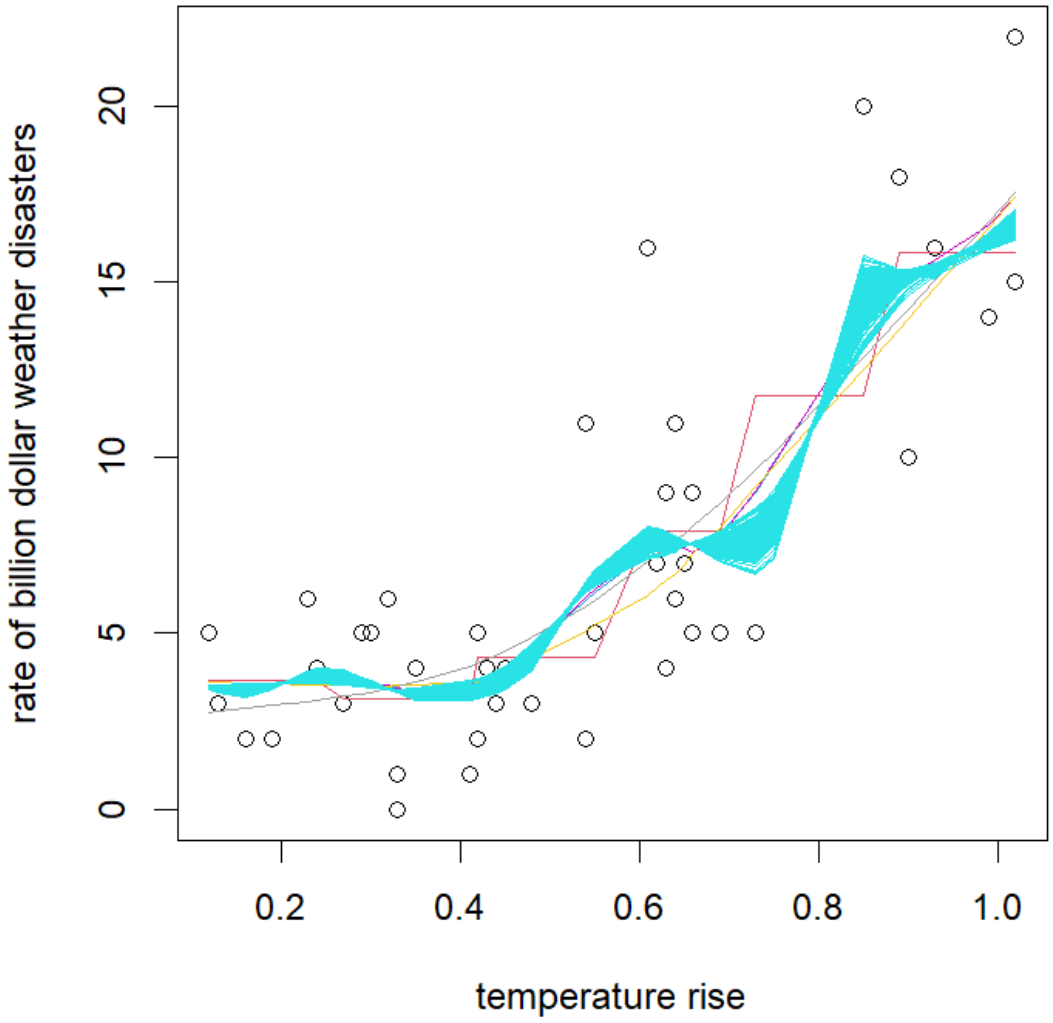

```
$theta
[1] 0.0695374

$theta0
[1] 0.063

$press
[1] 442.7174

$press0
[1] 443.7311
```

greedy.random.search(gauss.reg, NOAA, 3, 2, .078)



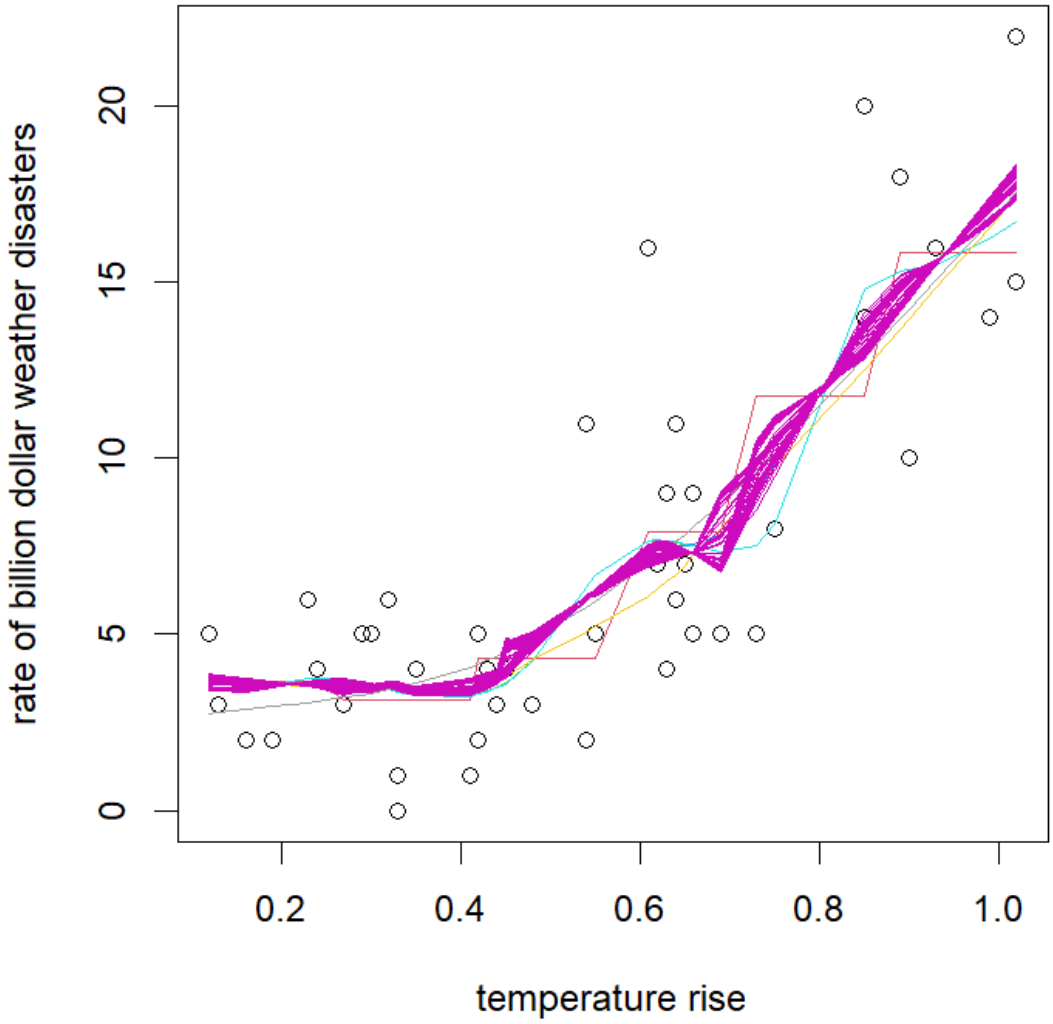

```
$theta
[1] 0.05646037

$theta0
[1] 0.078

$press
[1] 484.1306

$press0
[1] 489.4819
```

greedy.random.search.2d(gauss.mean.trunc, NOAA, 3, 2, .063, 20)



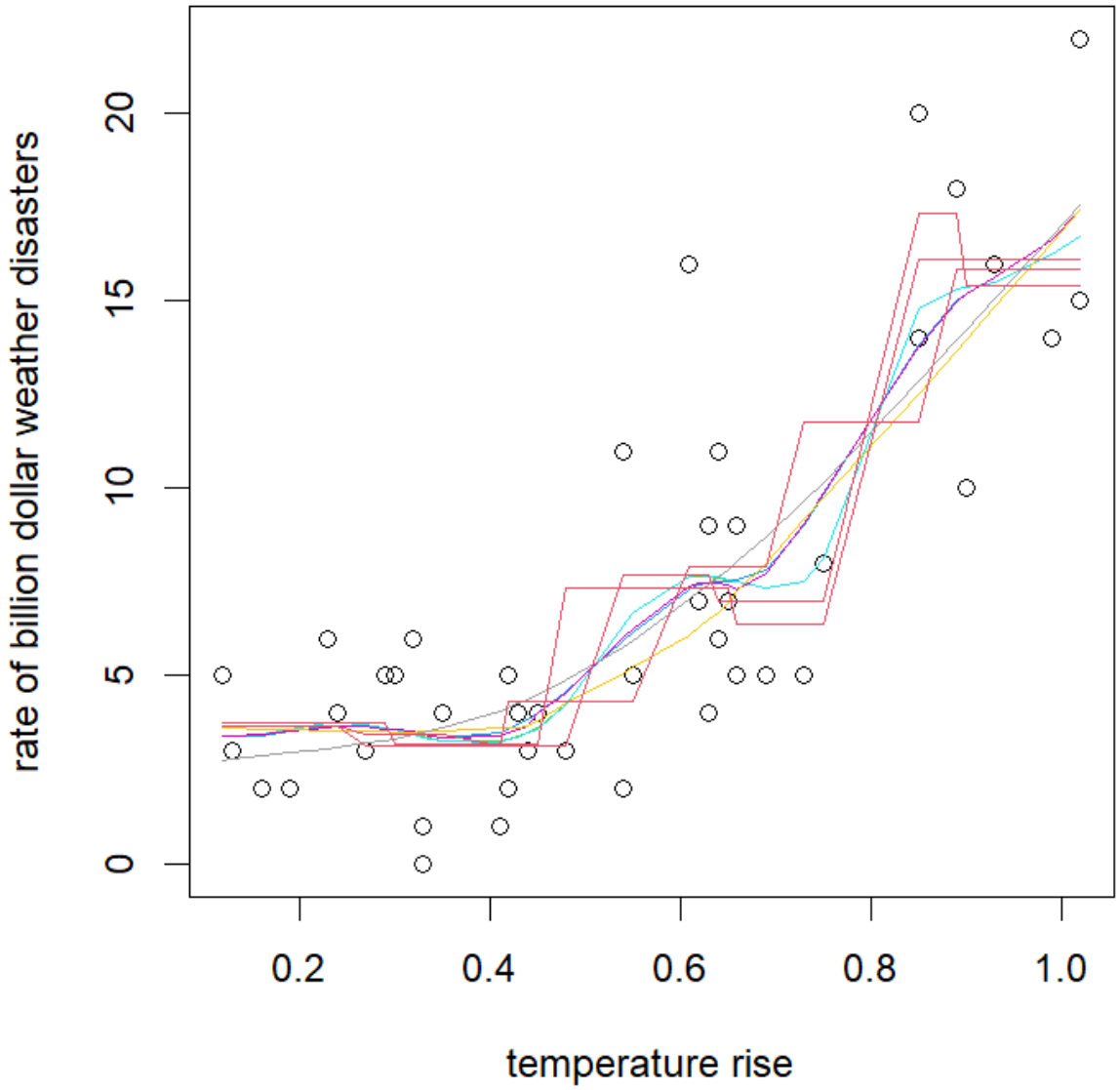

```
$theta
[1] 0.07033747

$theta0
[1] 0.063

$nnn
[1] 20

$nnn0
[1] 20

$press
[1] 442.3109

$press0
[1] 443.5786
```

greedy.random.search.2d(gauss.reg.trunc, NOAA, 3, 2, .08, 17)



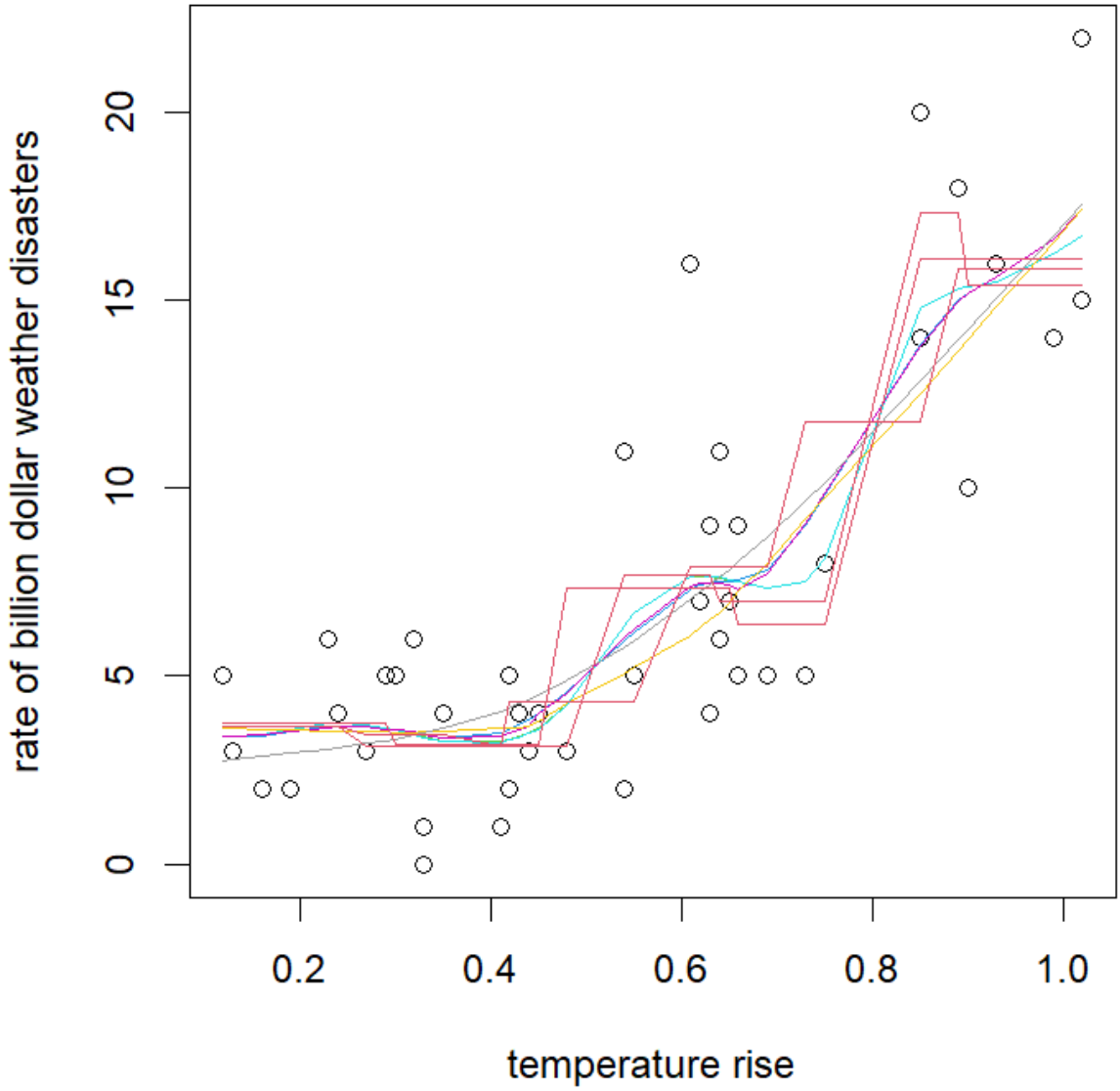

```
$theta
[1] 0.2379043

$theta0
[1] 0.08

$nnn
[1] 16

$nnn0
[1] 17

$press
[1] 464.0416

$press0
[1] 490.8155
```

greedy.random.search.discrete(bin.mean, NOAA, 3, 2, 6)




```
$theta
[1] 6

$theta0
[1] 6

$press
[1] 418.0708

$press0
[1] 418.0708
```

#further testing greedy.random.search.discrete
greedy.random.search.discrete(bin.mean, NOAA, 3, 2, 5)




```
$theta
[1] 6

$theta0
[1] 5

$press
[1] 418.0708

$press0
[1] 570.4185
```