Fish-Behaviour-Exploration

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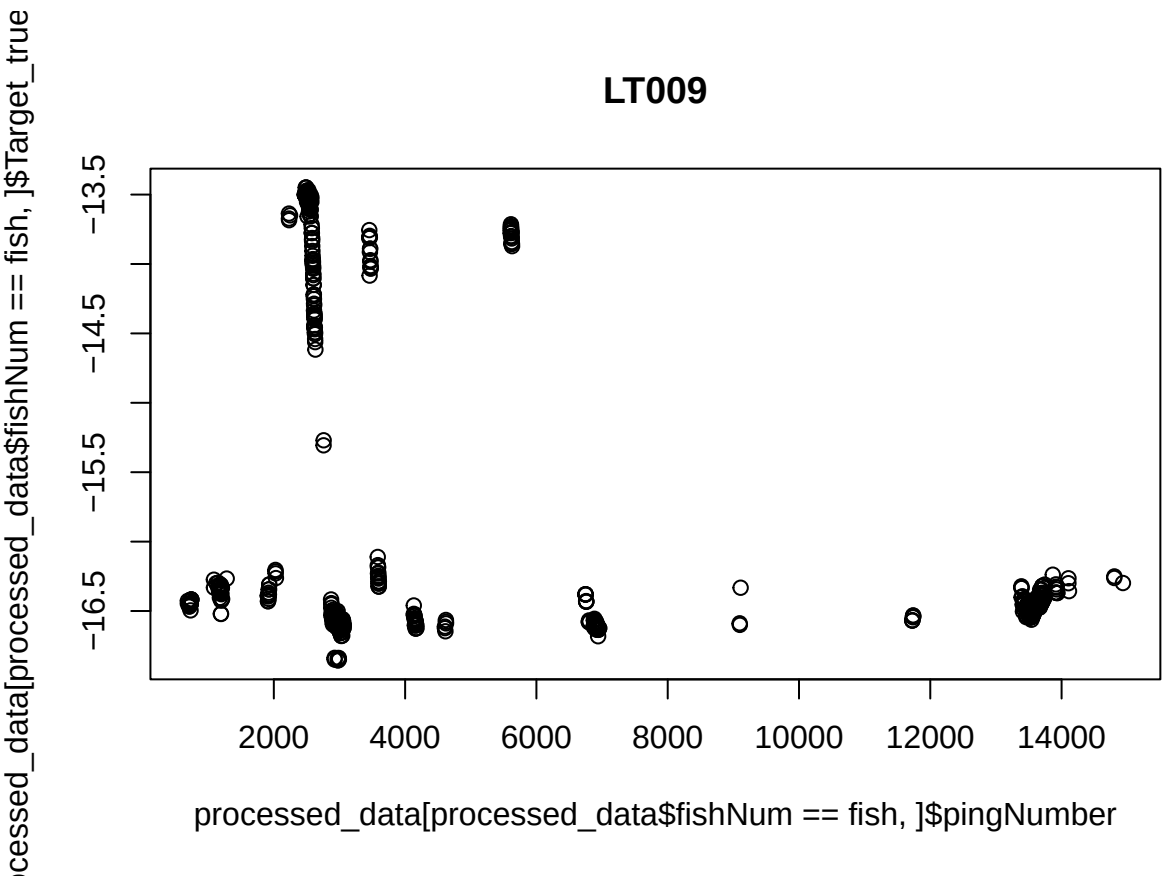
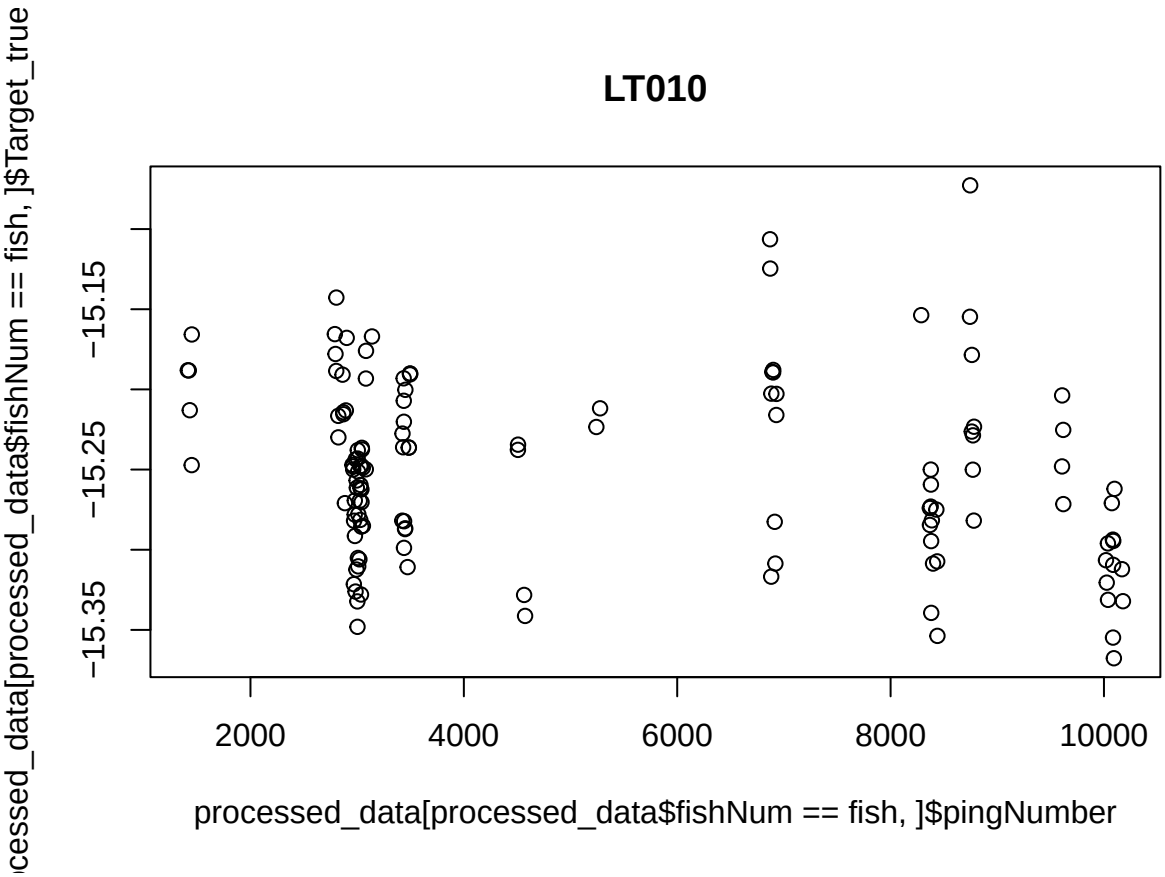
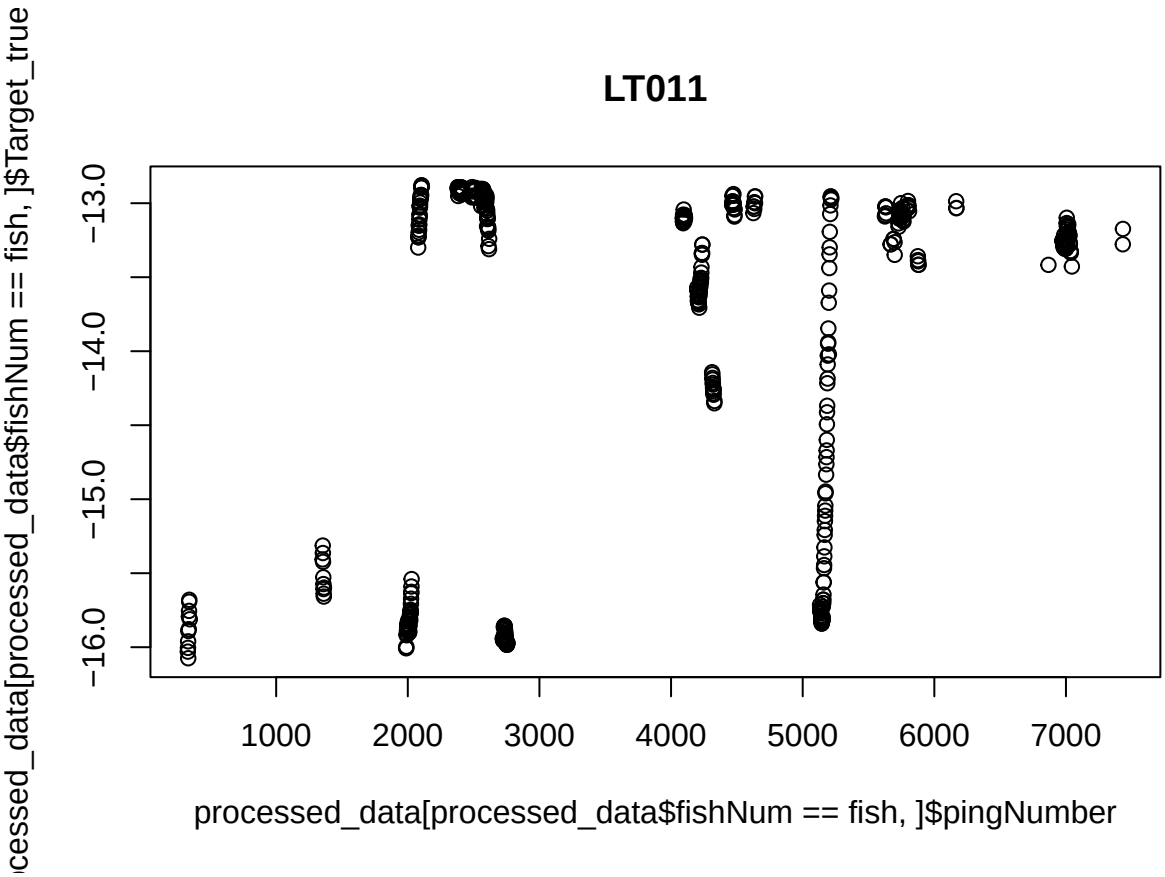
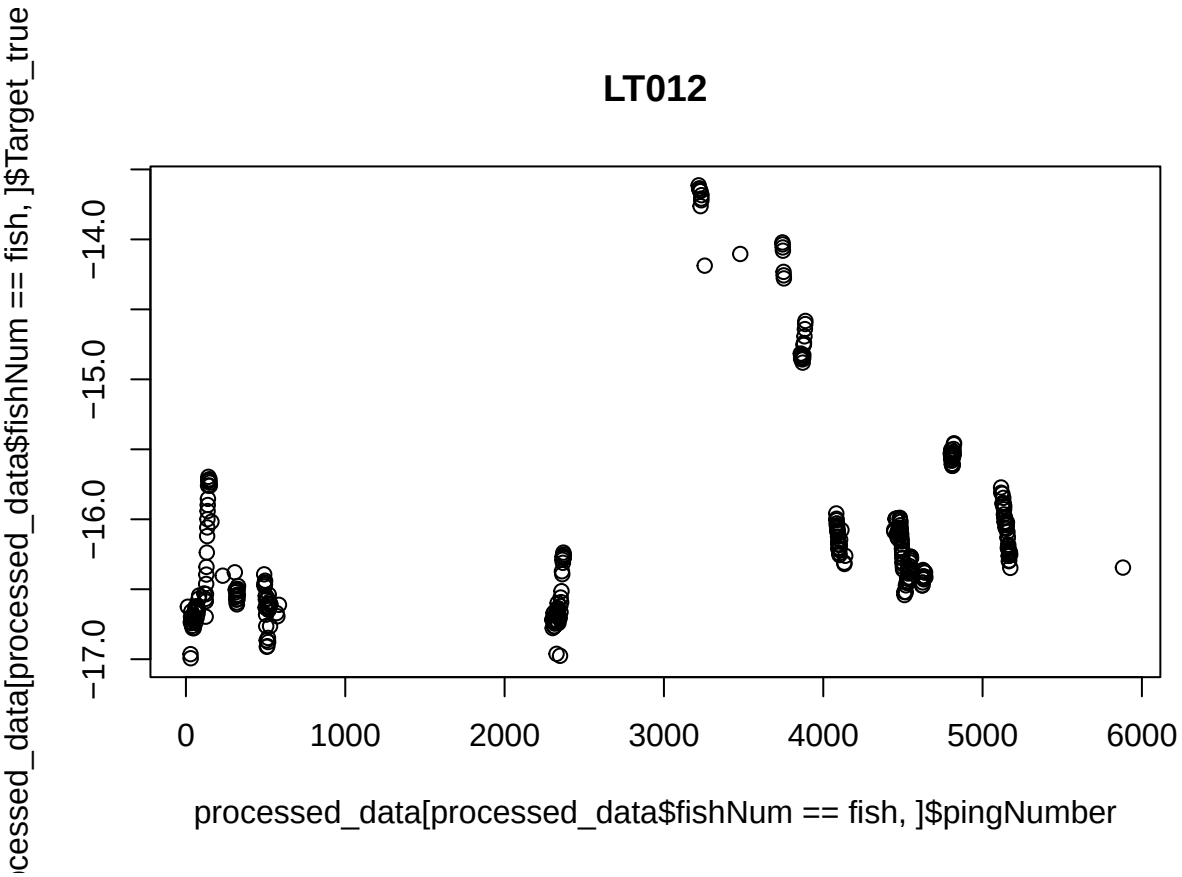
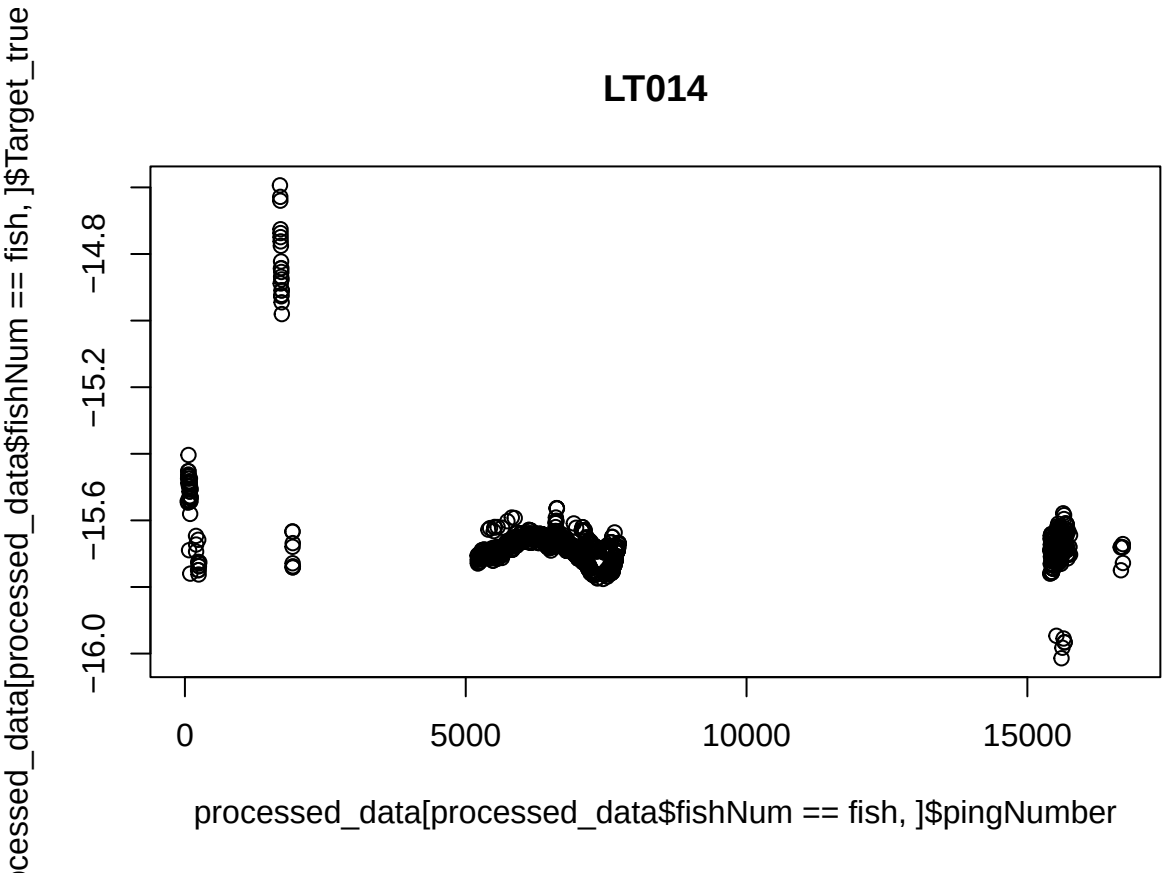
```
# make plots for depth over time
fishes <- unique(processed_data$fishNum)

for (fish in fishes) {
  plot(processed_data[processed_data$fishNum == fish,]$pingNumber, -processed_data[processed_data$fishNu
}
```

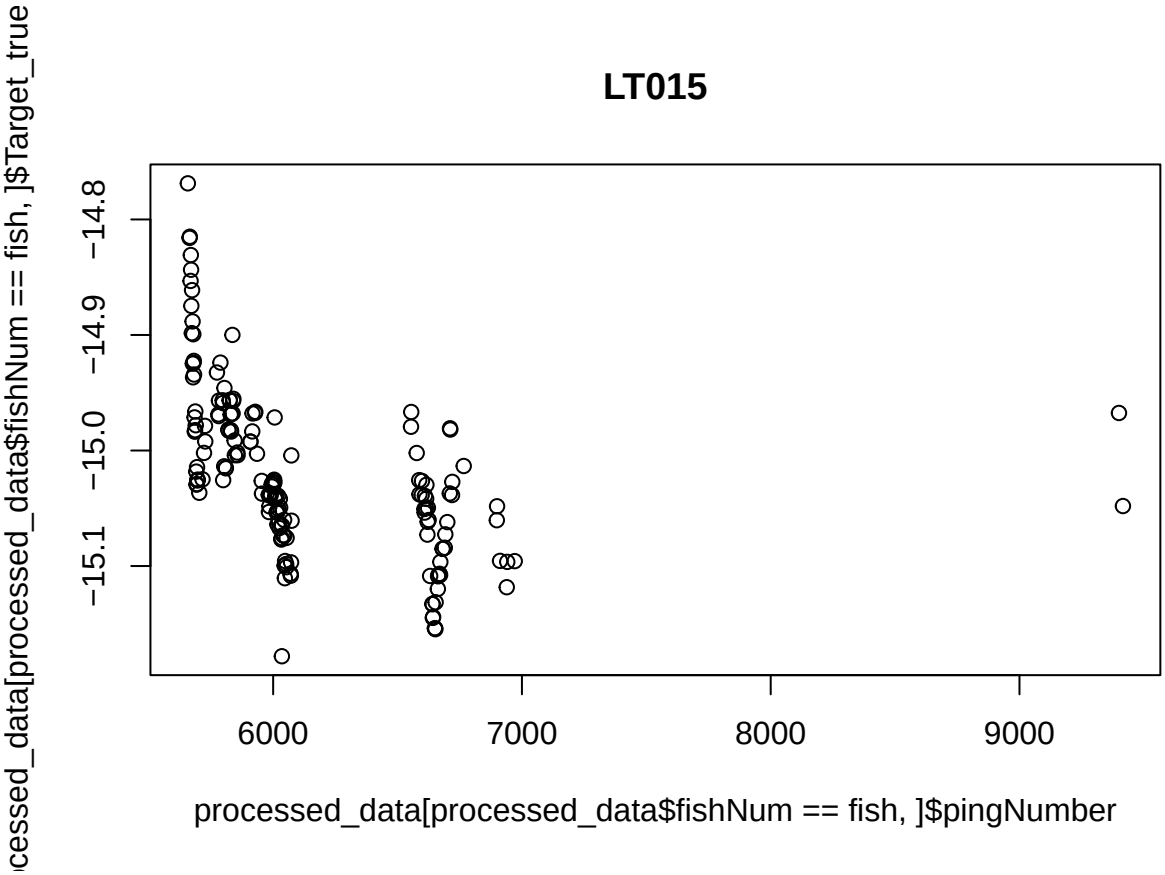


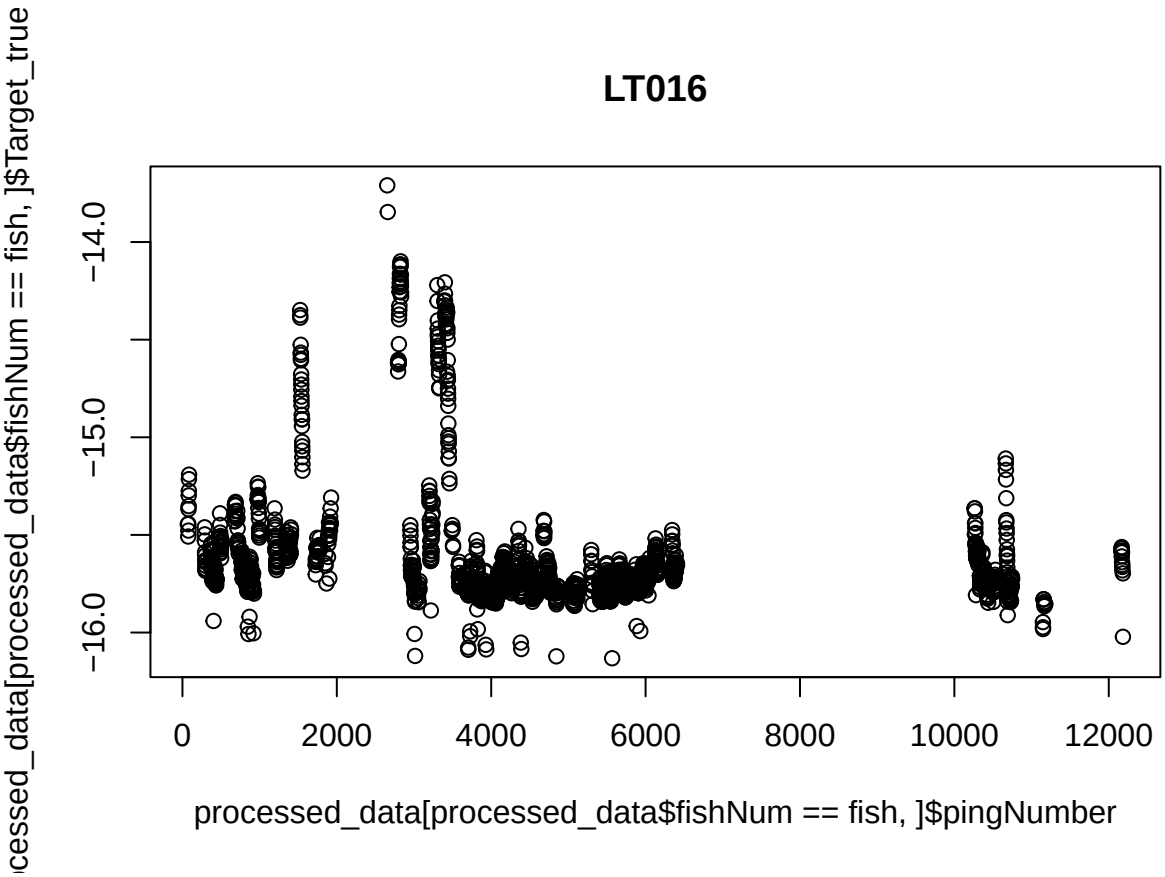

LT010
−15.15
−15.25
−15.35
2000
4000
6000
8000
10000
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

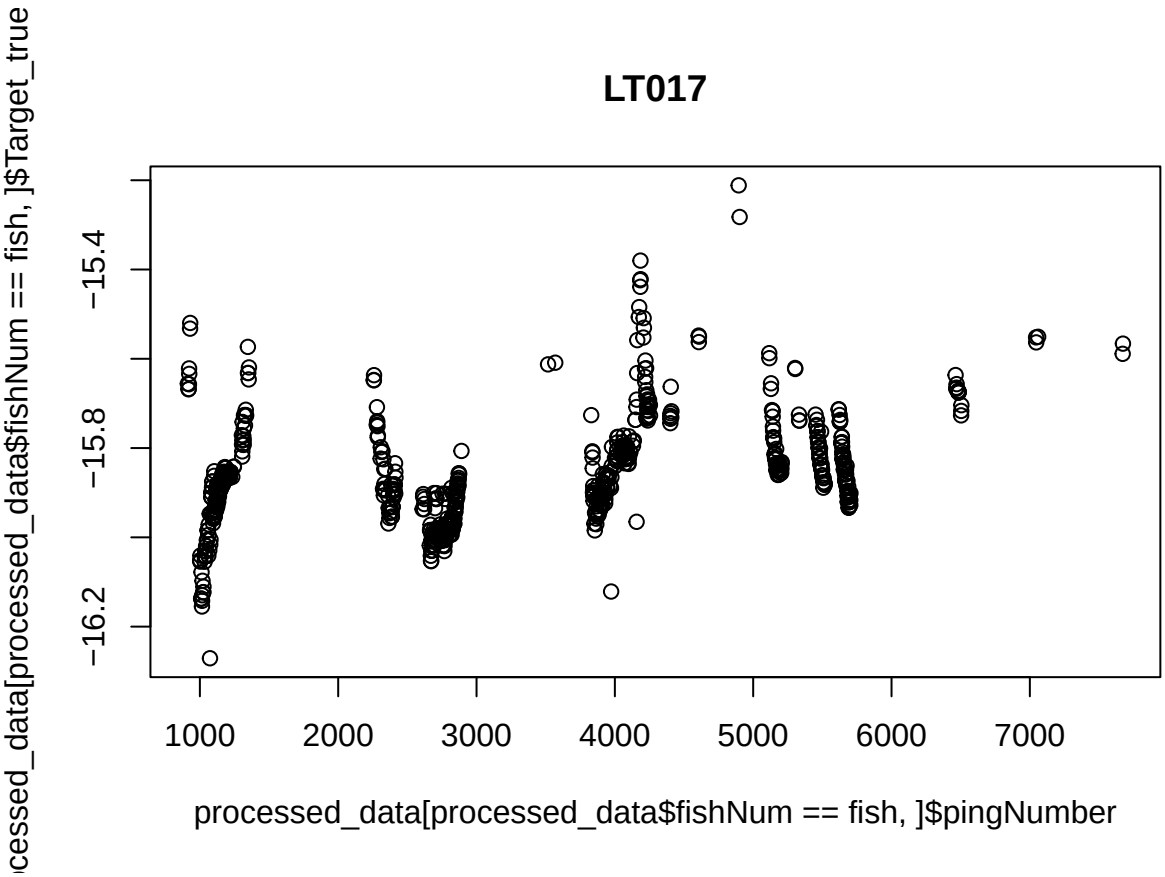

LT011
−13.0
−14.0
−15.0
−16.0
1000
2000
3000
4000
5000
6000
7000
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

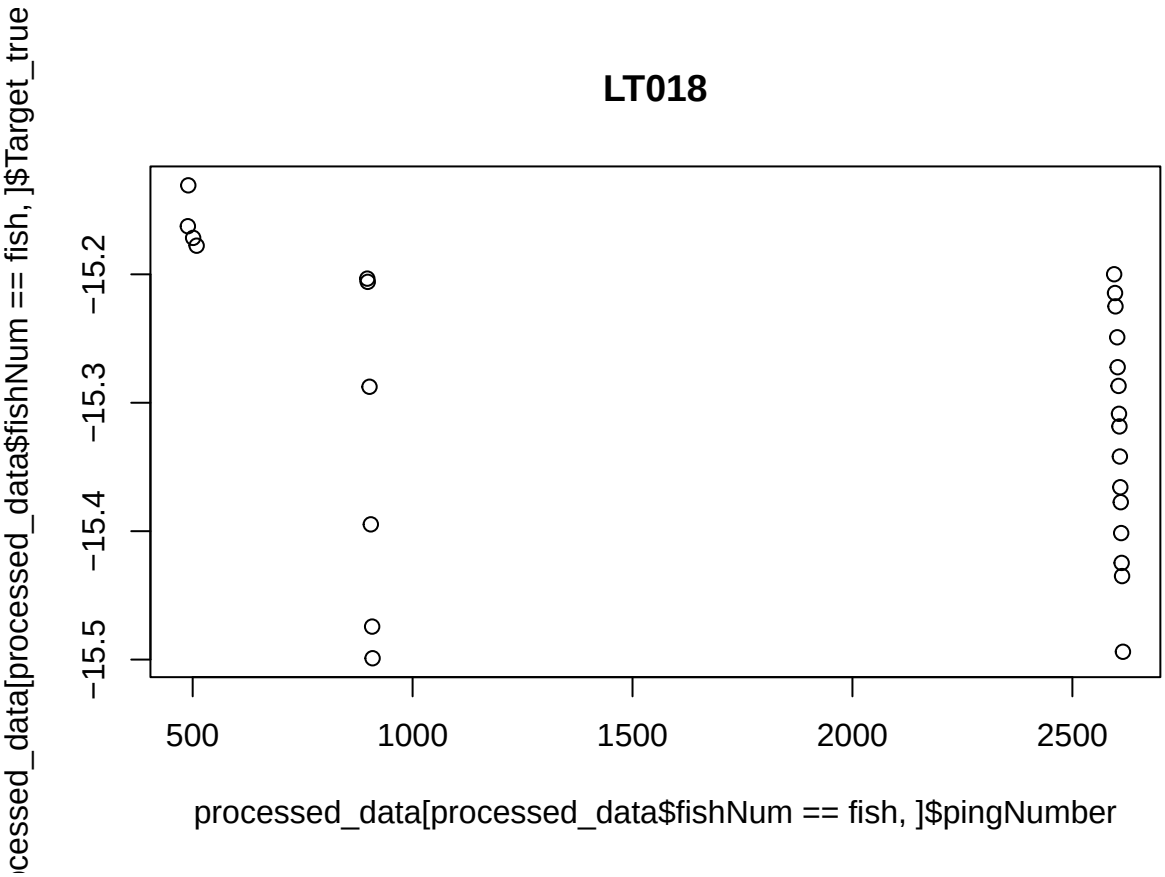

LT012
cessed_data[processed_data$fishNum == fish,]$Target_true
−17.0
−16.0
−15.0
−14.0
0
1000
2000
3000
4000
5000
6000
processed_data[processed_data$fishNum == fish,]$pingNumber

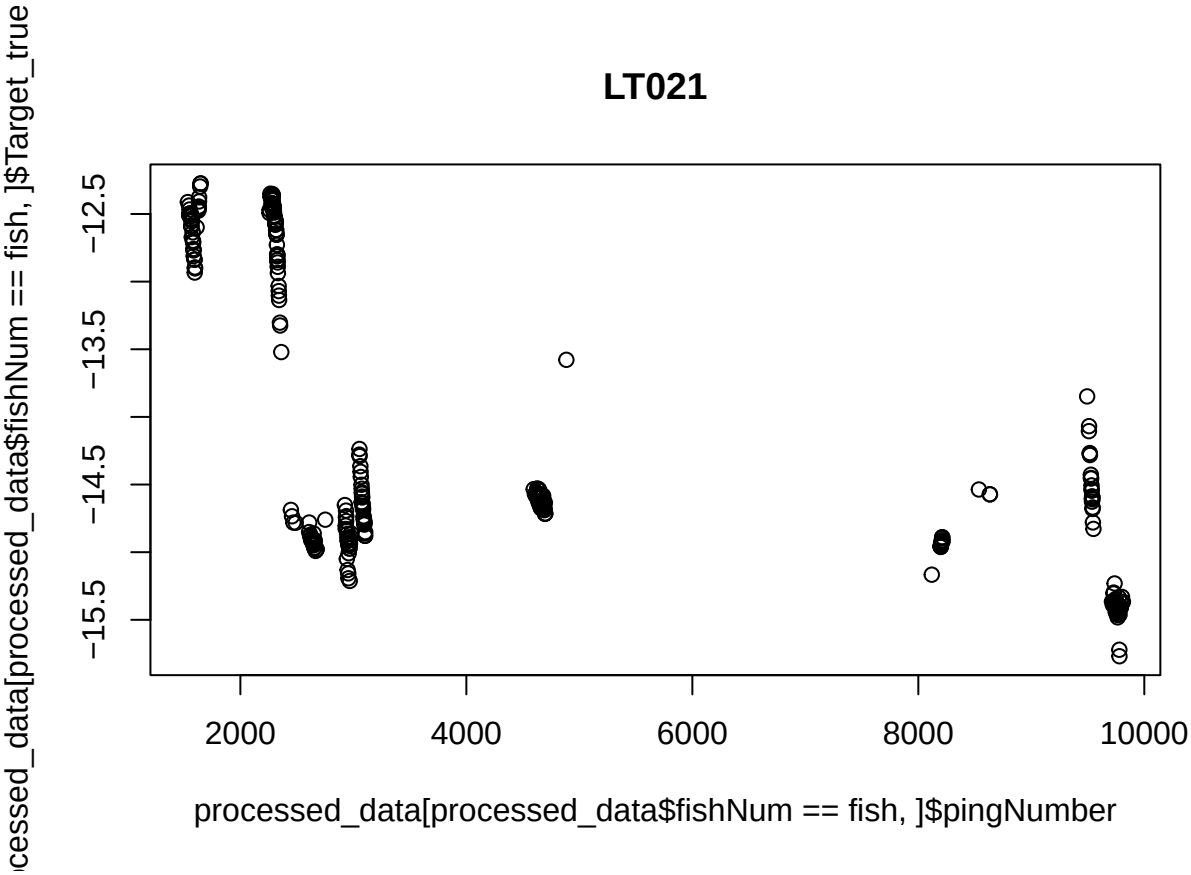

LT014
cessed_data[processed_data$fishNum == fish,]$Target_true
−14.8
−15.2
−15.6
−16.0
0
5000
10000
15000
processed_data[processed_data$fishNum == fish,]$pingNumber

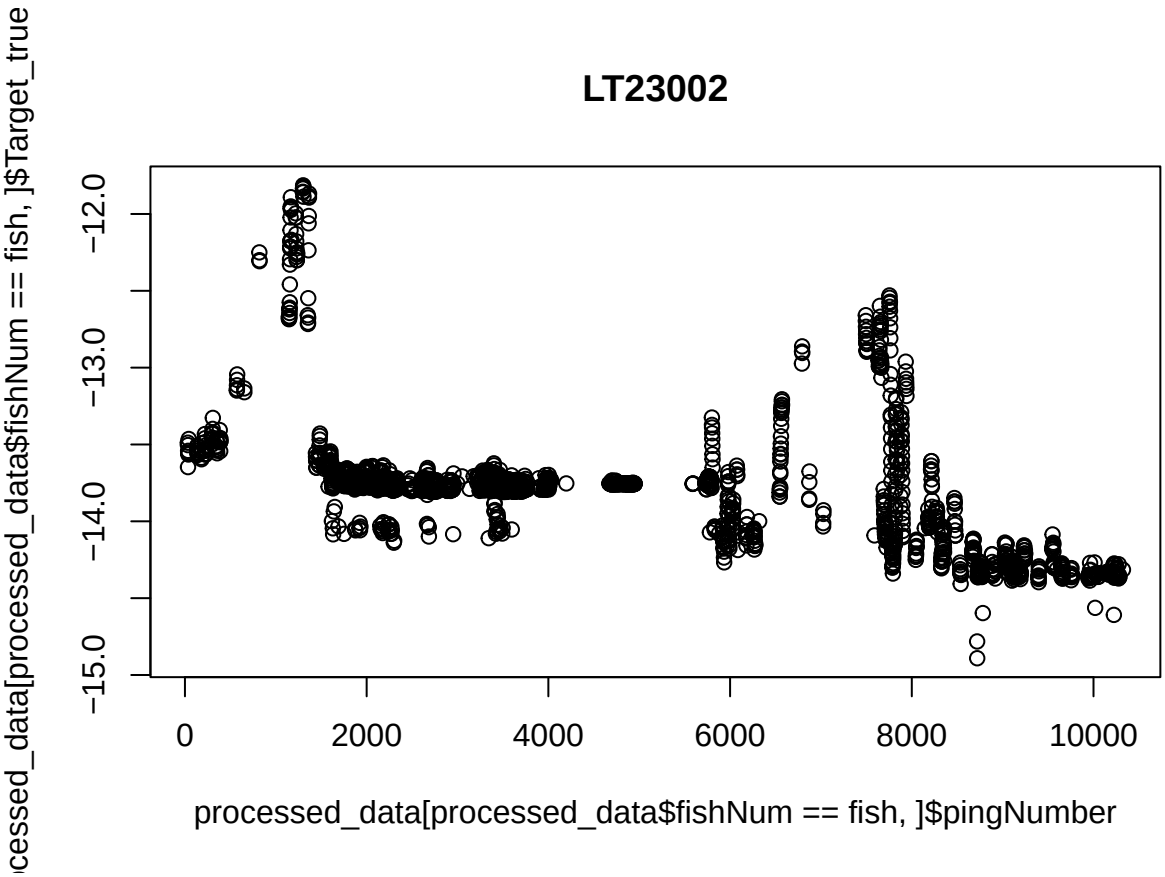

LT015
cessed_data[processed_data$fishNum == fish,]$Target_true
−15.1
−15.0
−14.9
−14.8
6000
7000
8000
9000
processed_data[processed_data$fishNum == fish,]$pingNumber

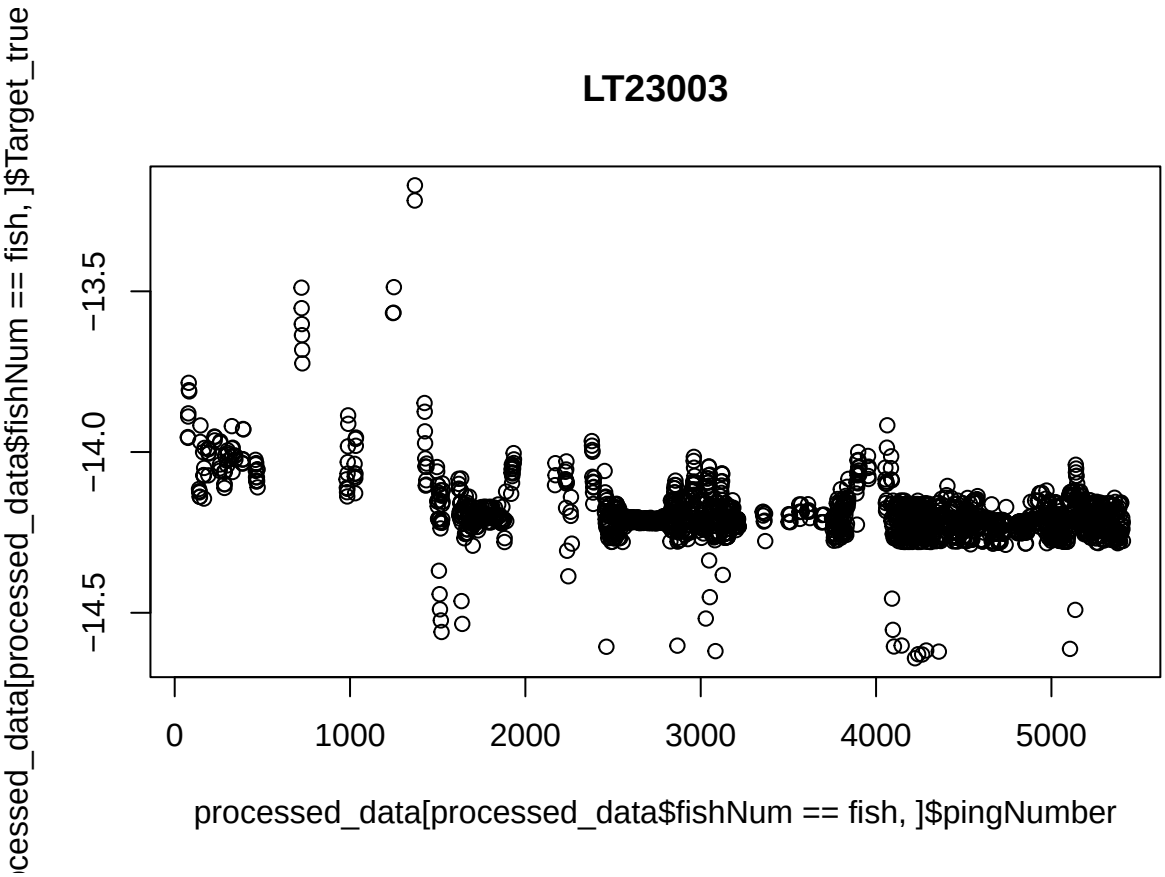

LT016
−14.0
−15.0
−16.0
0
2000
4000
6000
8000
10000
12000
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

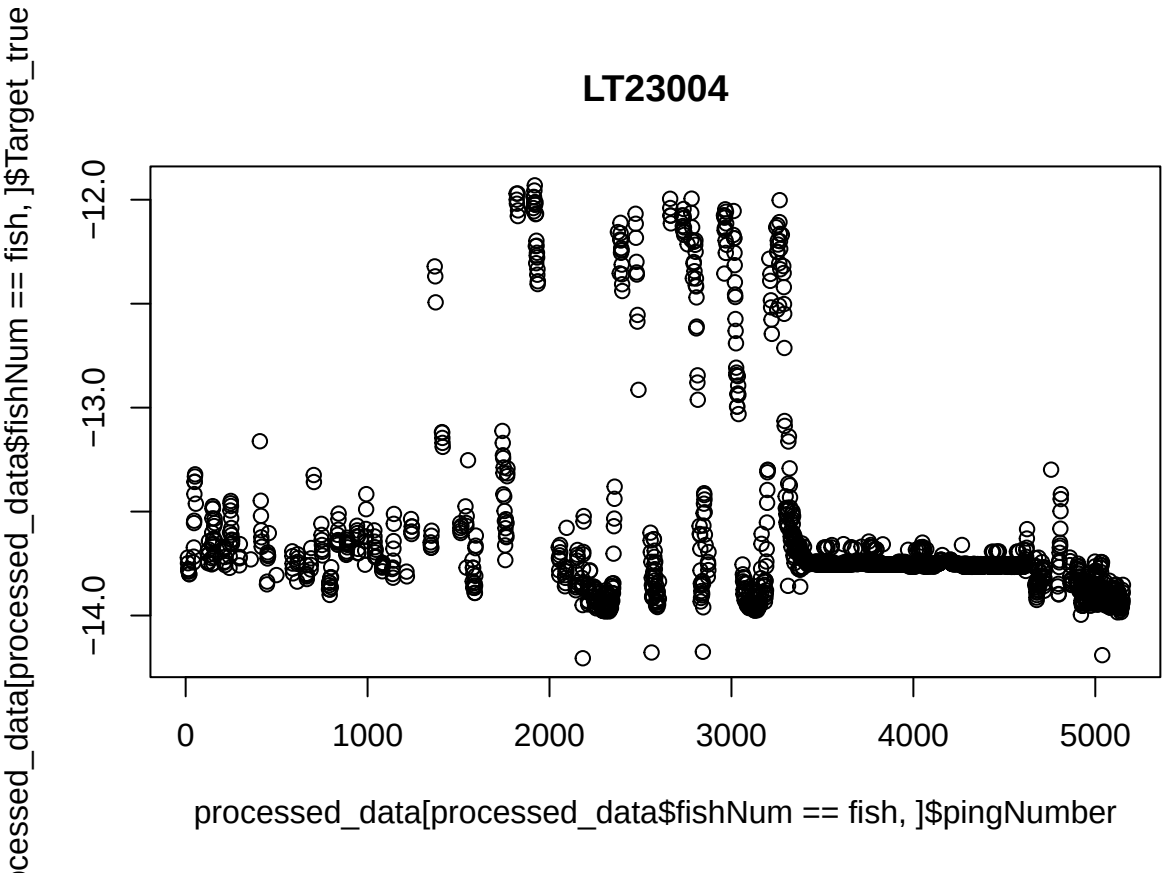

LT017
cessed_data[processed_data$fishNum == fish,]$Target_true
−16.2
−15.8
−15.4
1000
2000
3000
4000
5000
6000
7000
processed_data[processed_data$fishNum == fish,]$pingNumber

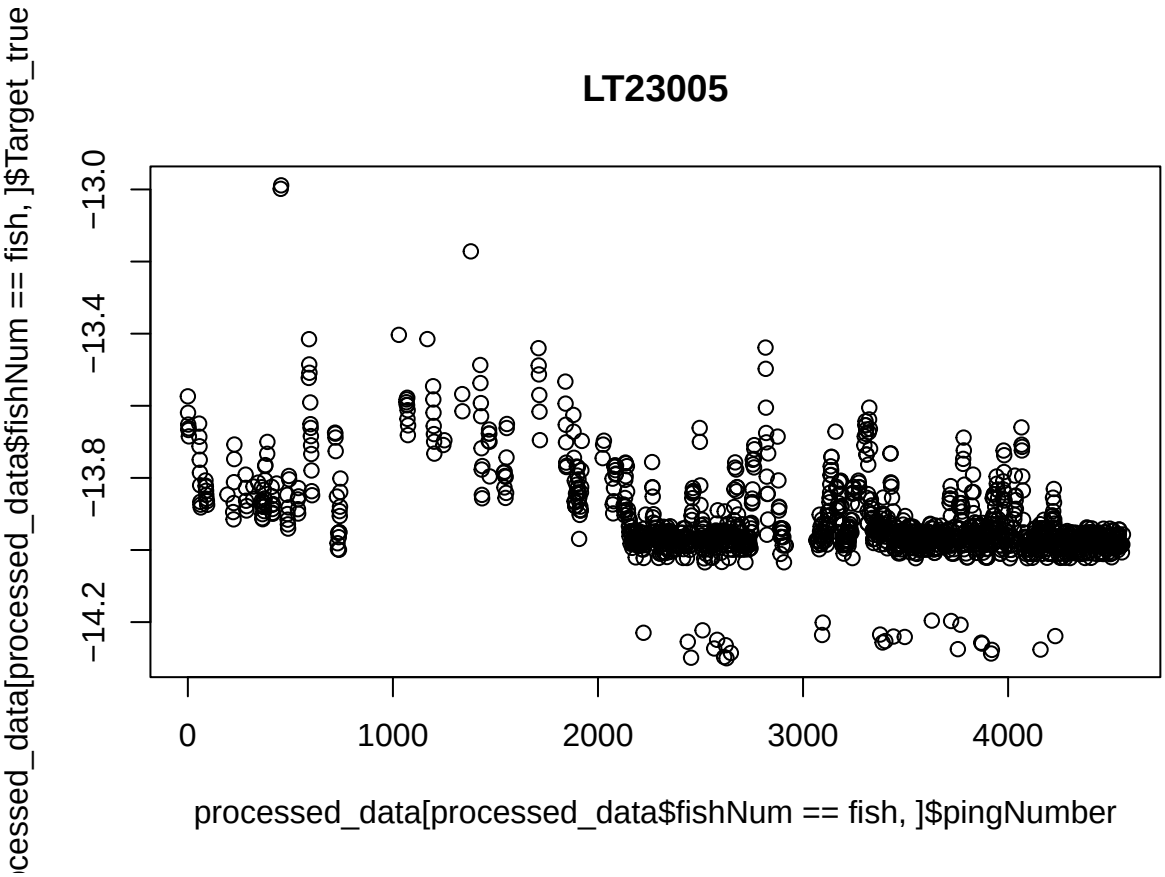

LT018
−15.2
−15.3
−15.4
−15.5
500
1000
1500
2000
2500
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

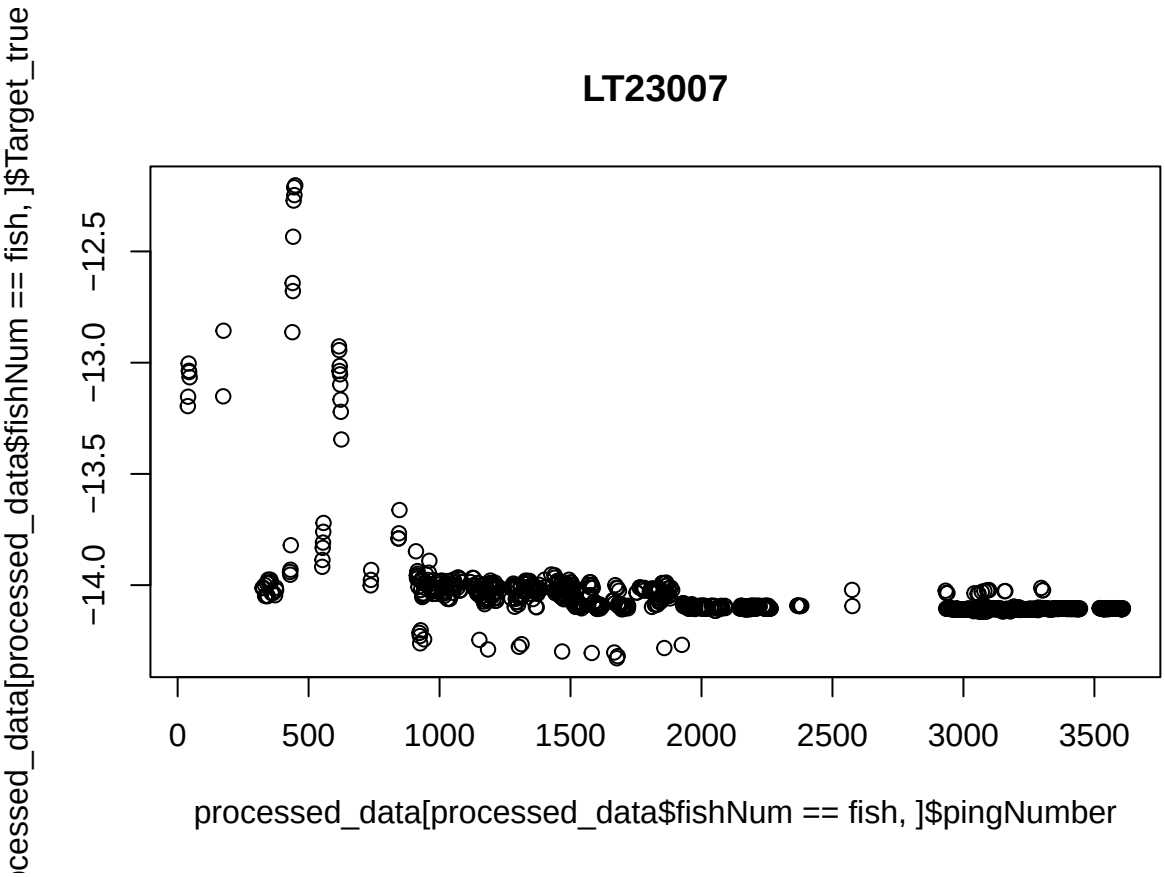

LT021
cessed_data[processed_data$fishNum == fish,]$Target_true
−12.5
−13.5
−14.5
−15.5
2000
4000
6000
8000
10000
processed_data[processed_data$fishNum == fish,]$pingNumber

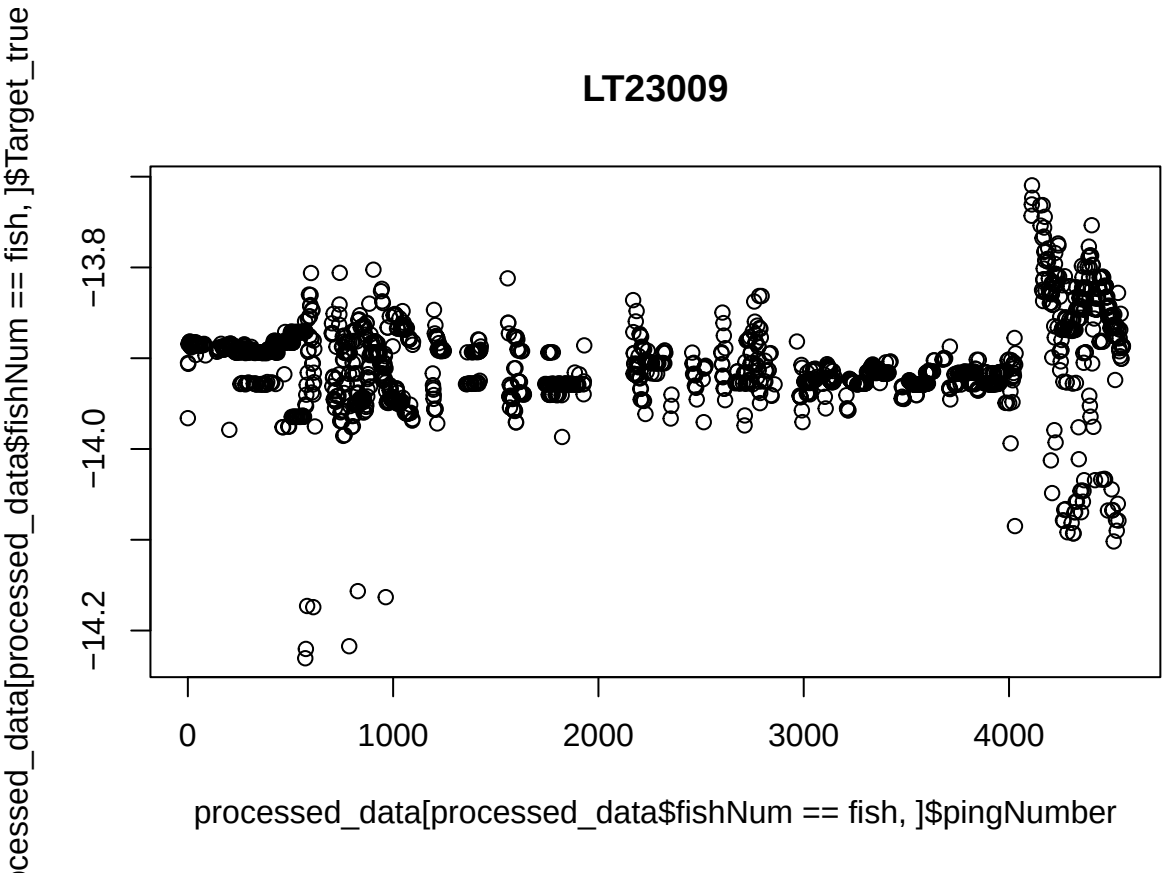

LT23002
−12.0
−13.0
−14.0
−15.0
0
2000
4000
6000
8000
10000
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

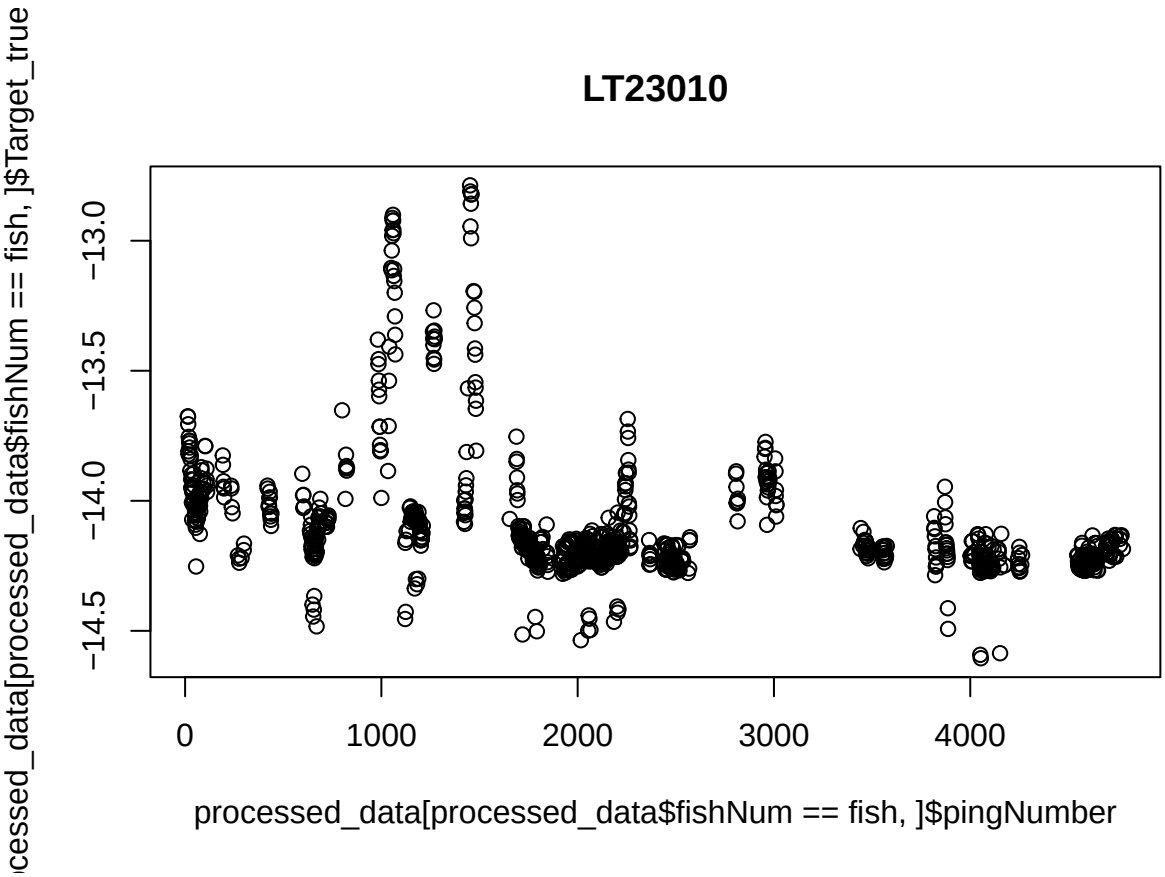

LT23003
cessed_data[processed_data$fishNum == fish,]$Target_true
−13.5
−14.0
−14.5
0
1000
2000
3000
4000
5000
processed_data[processed_data$fishNum == fish,]$pingNumber

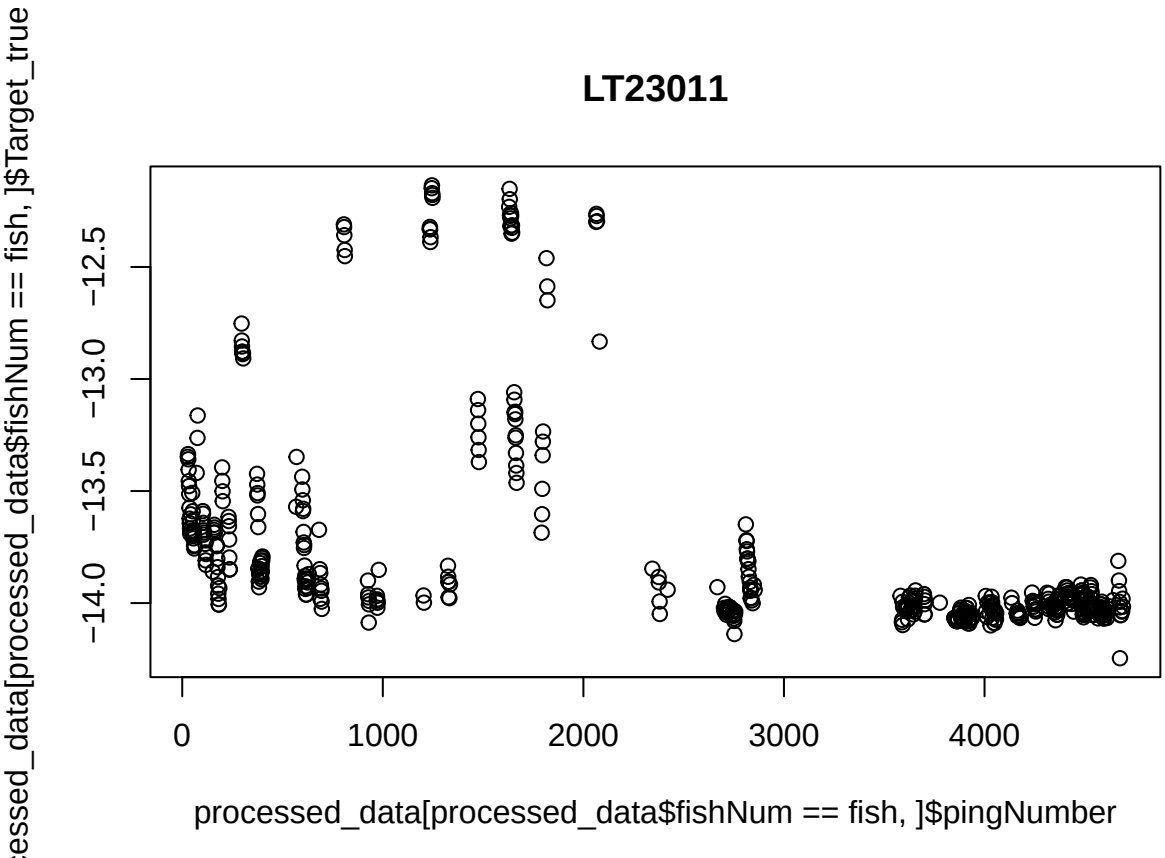

LT23004
−12.0
−13.0
−14.0
0
1000
2000
3000
4000
5000
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

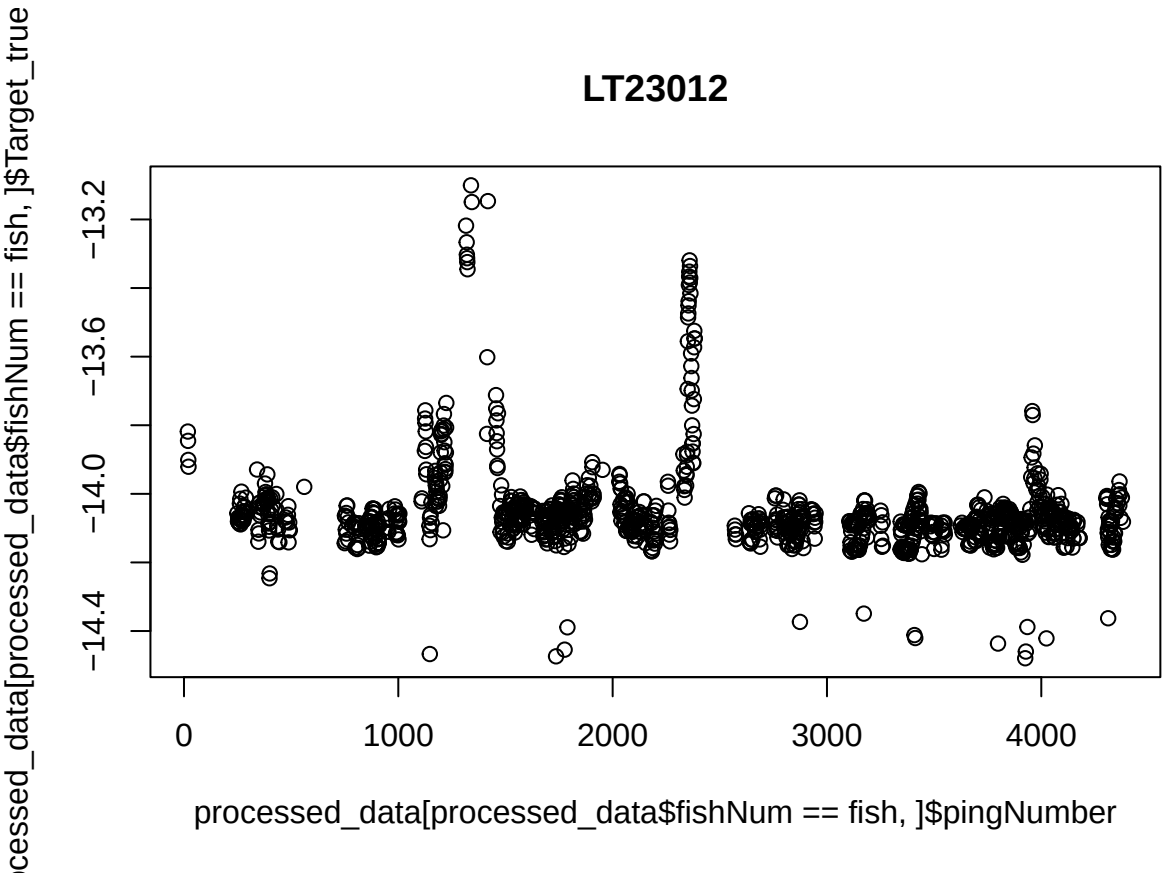

LT23005
cessed_data[processed_data$fishNum == fish,]$Target_true
−13.0
−13.4
−13.8
−14.2
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

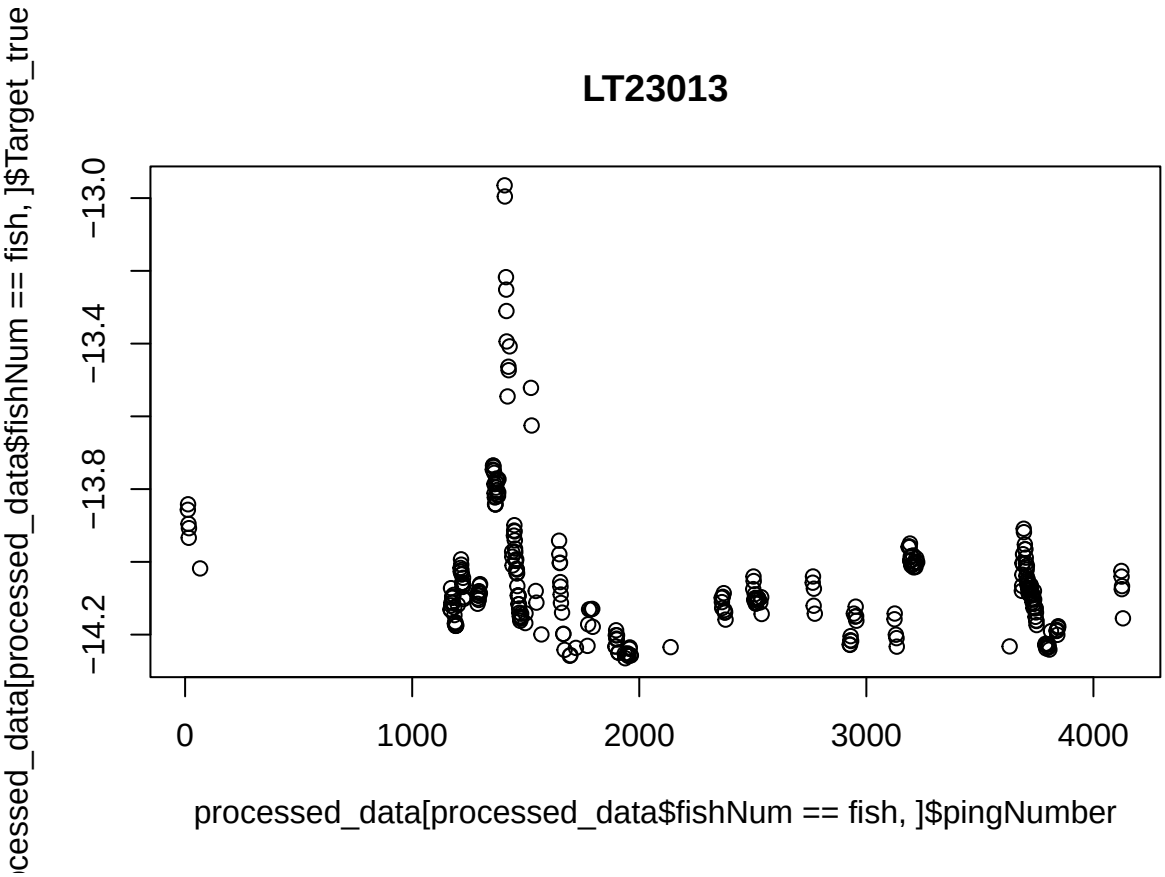

LT23007
cessed_data[processed_data$fishNum == fish,]$Target_true
−14.0
−13.5
−13.0
−12.5
0
500
1000
1500
2000
2500
3000
3500
processed_data[processed_data$fishNum == fish,]$pingNumber

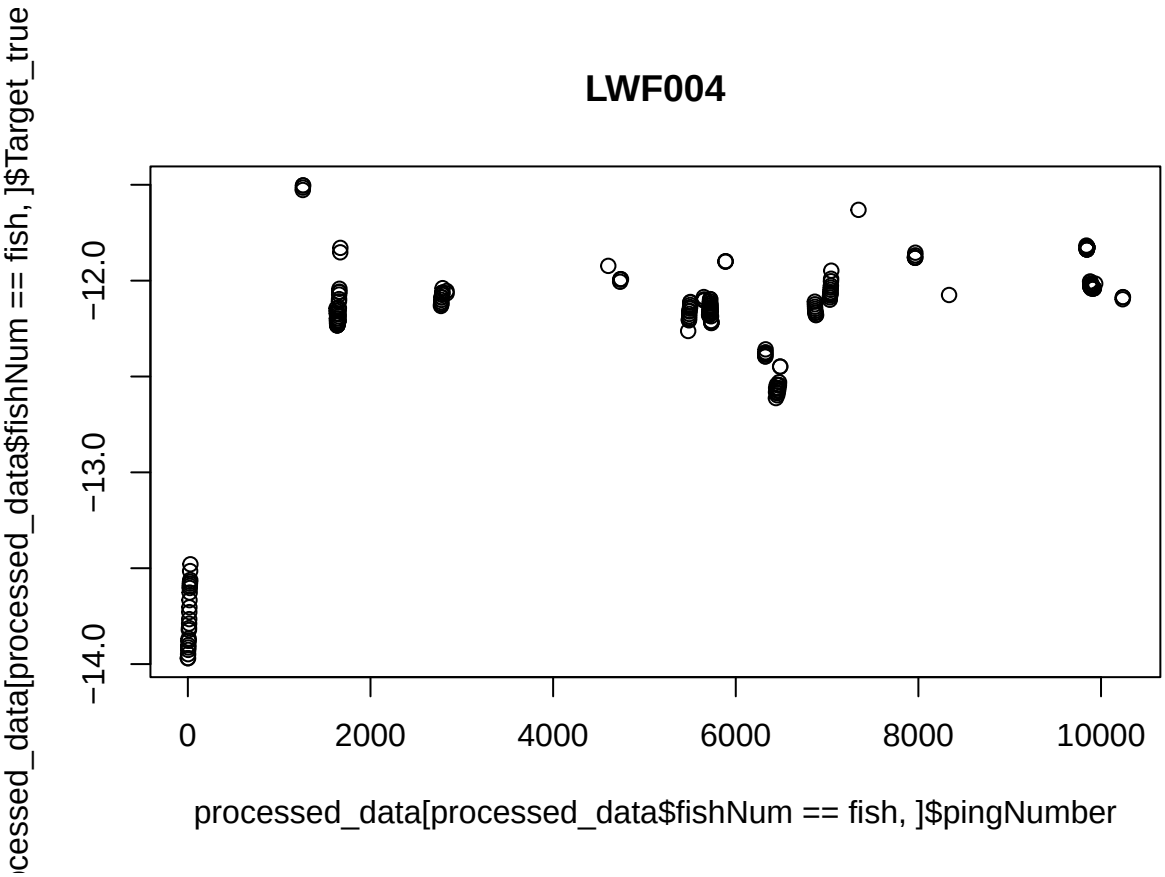

LT23009
cessed_data[processed_data$fishNum == fish,]$Target_true
−13.8
−14.0
−14.2
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

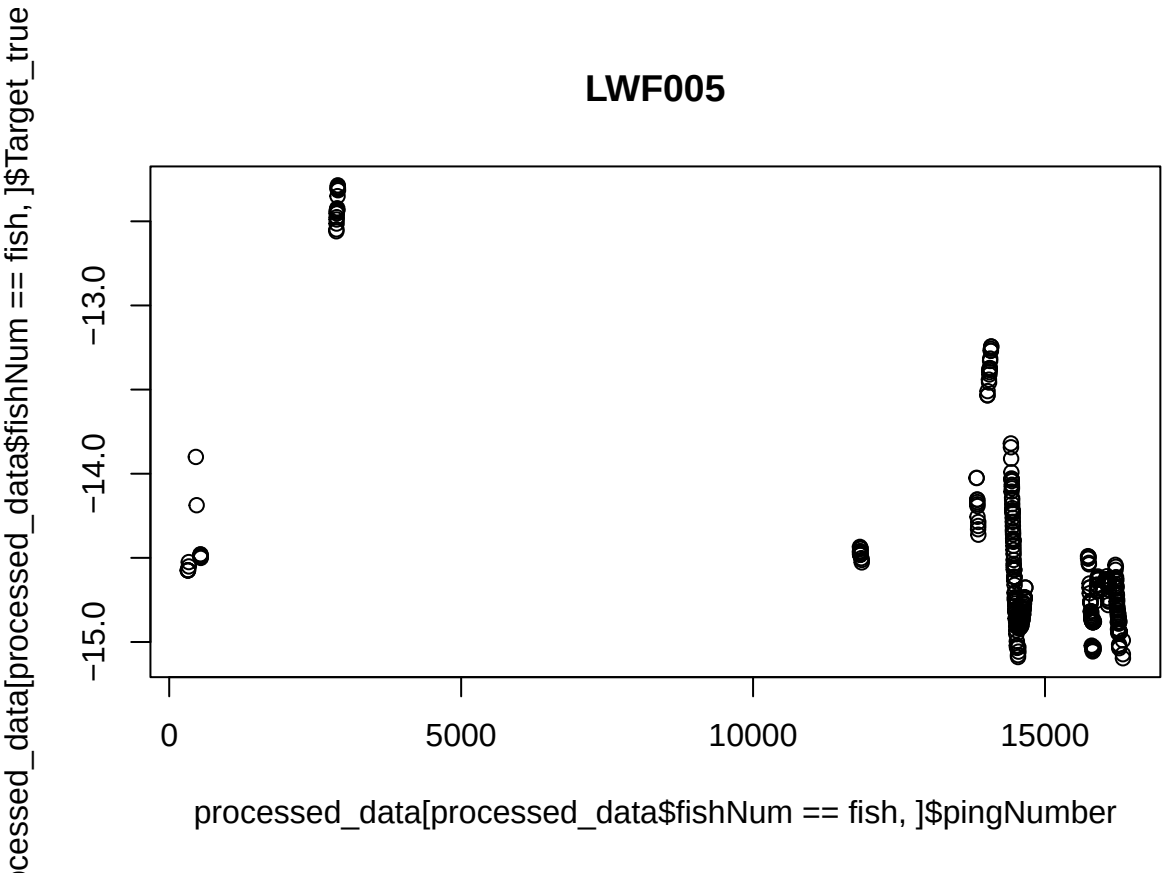

LT23010
cessed_data[processed_data$fishNum == fish,]$Target_true
−14.5
−14.0
−13.5
−13.0
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

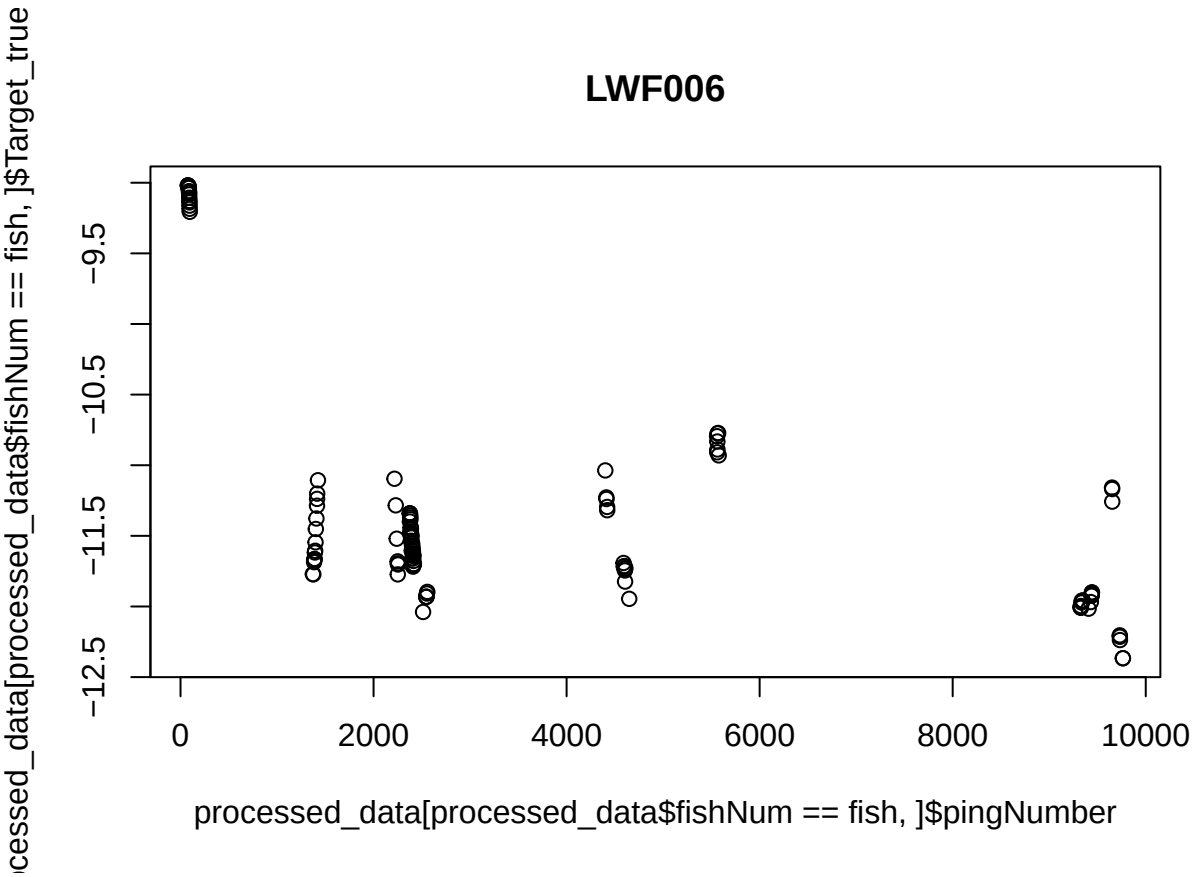

LT23011
−12.5
−13.0
−13.5
−14.0
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

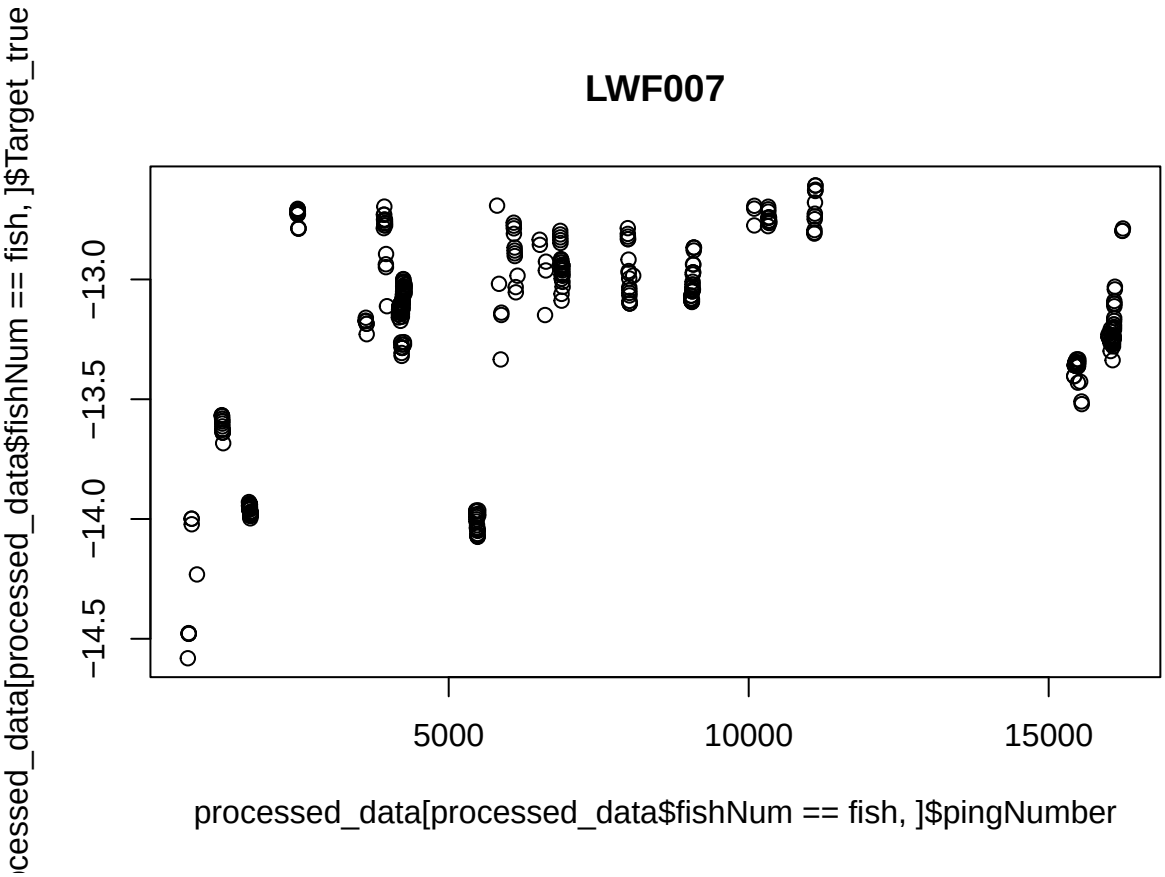

LT23012
cessed_data[processed_data$fishNum == fish,]$Target_true
−14.4
−14.0
−13.6
−13.2
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

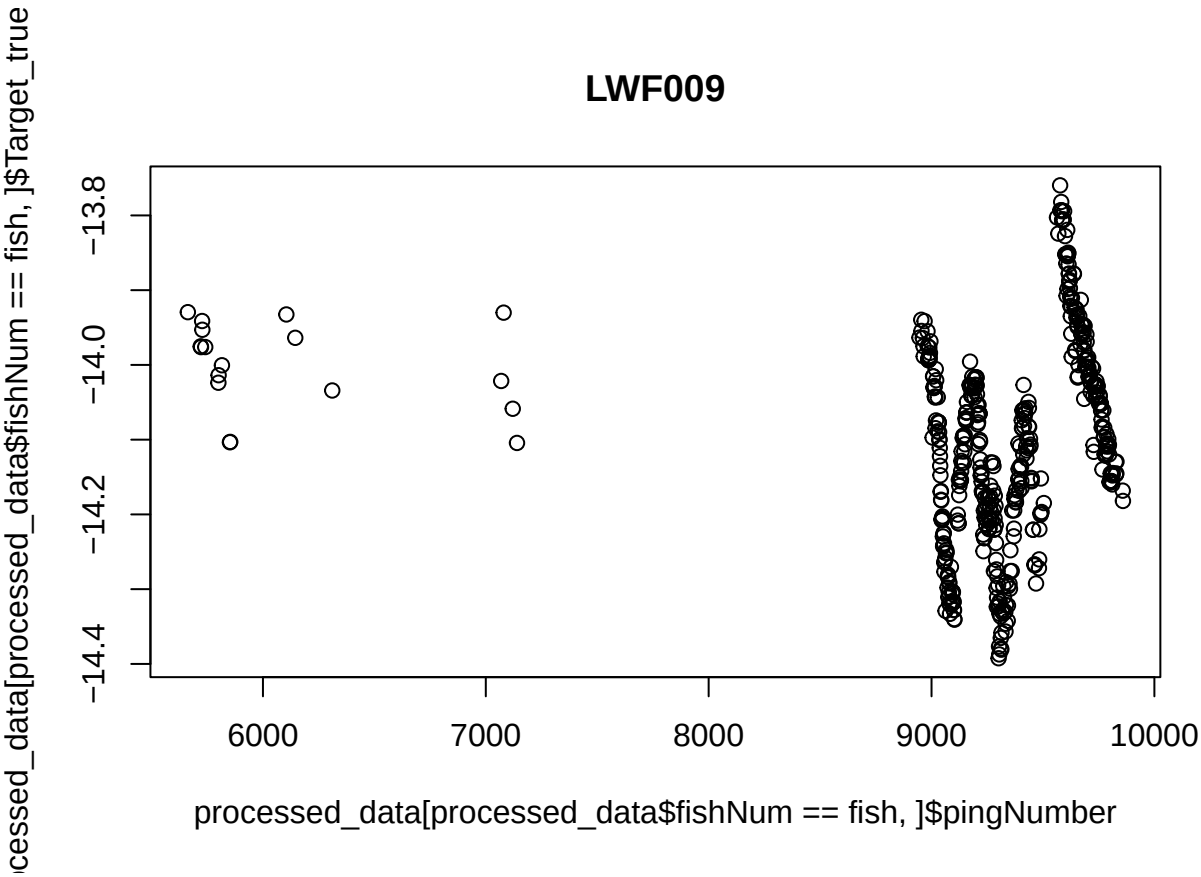

LT23013
cessed_data[processed_data$fishNum == fish,]$Target_true
−13.0
−13.4
−13.8
−14.2
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

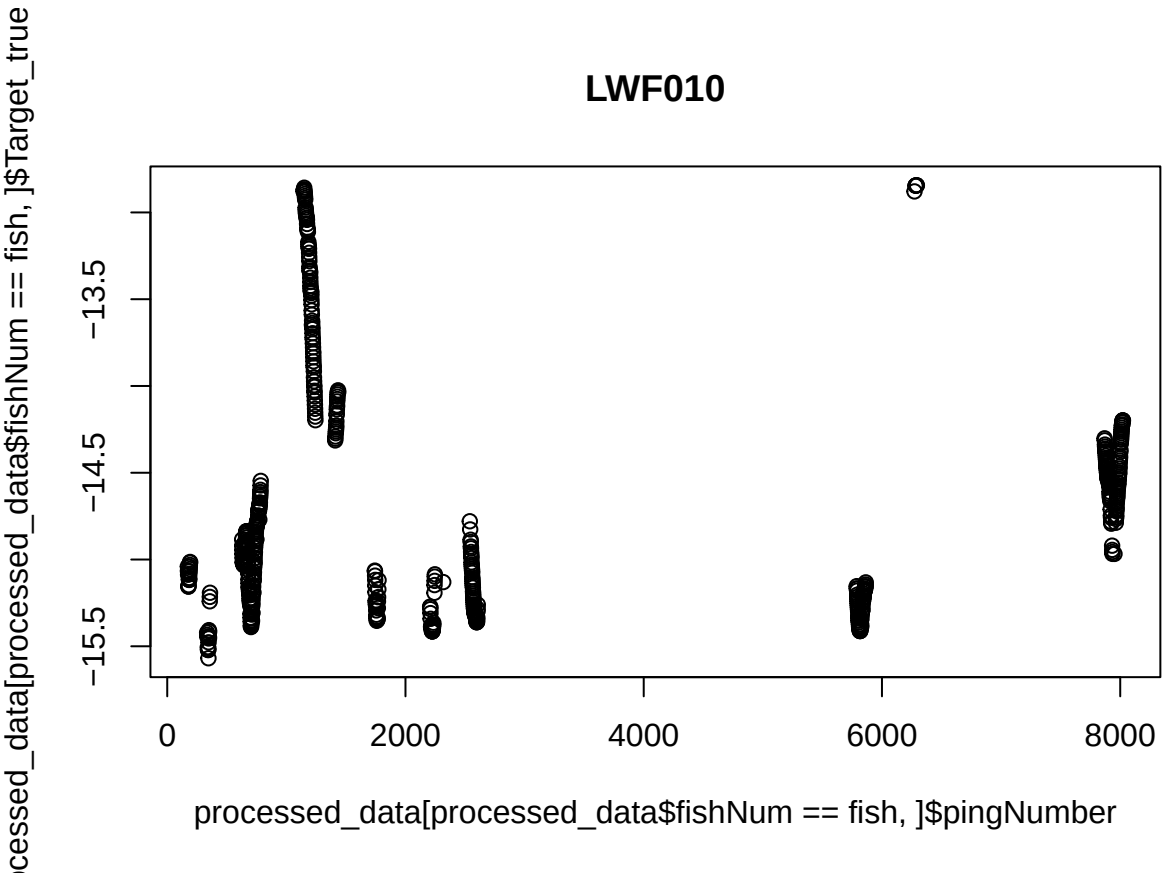

LWF004
cessed_data[processed_data$fishNum == fish,]$Target_true
−12.0
−13.0
−14.0
0
2000
4000
6000
8000
10000
processed_data[processed_data$fishNum == fish,]$pingNumber

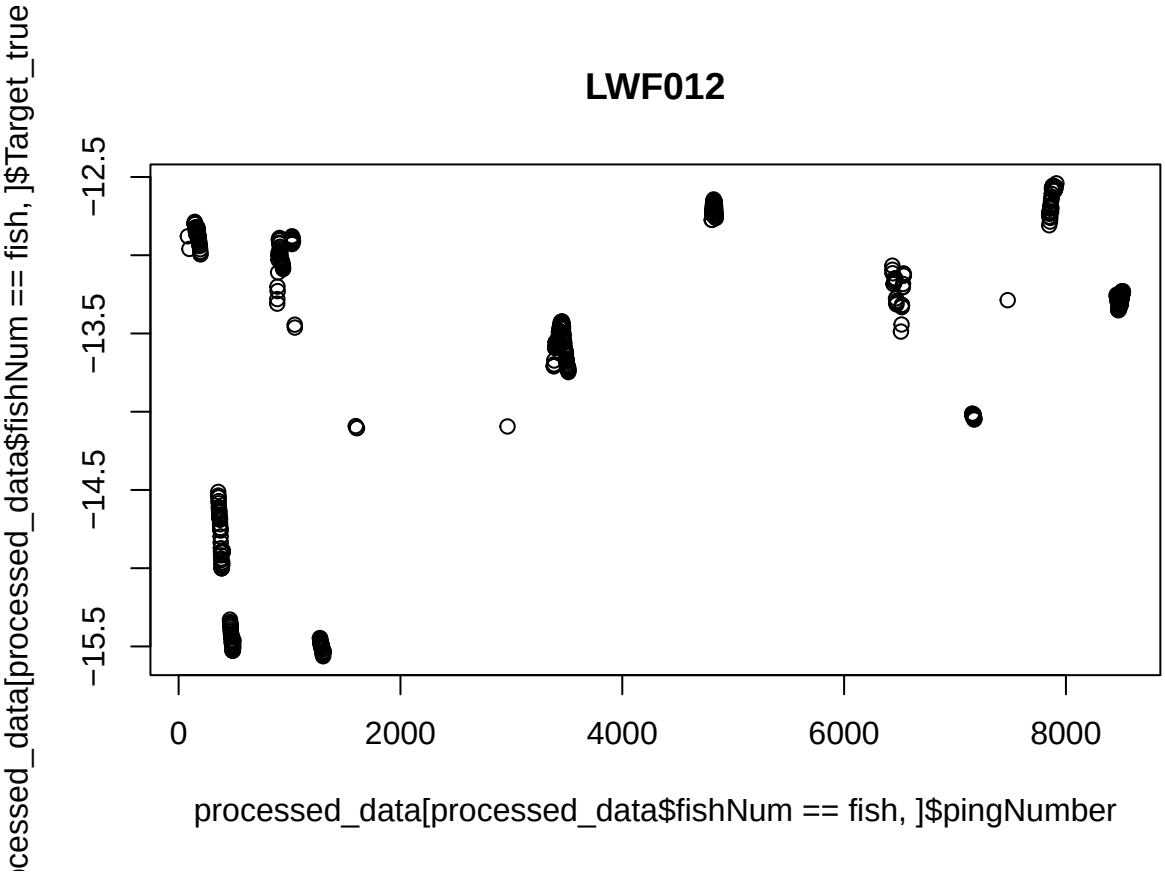

LWF005
cessed_data[processed_data$fishNum == fish,]$Target_true
−13.0
−14.0
−15.0
0
5000
10000
15000
processed_data[processed_data$fishNum == fish,]$pingNumber

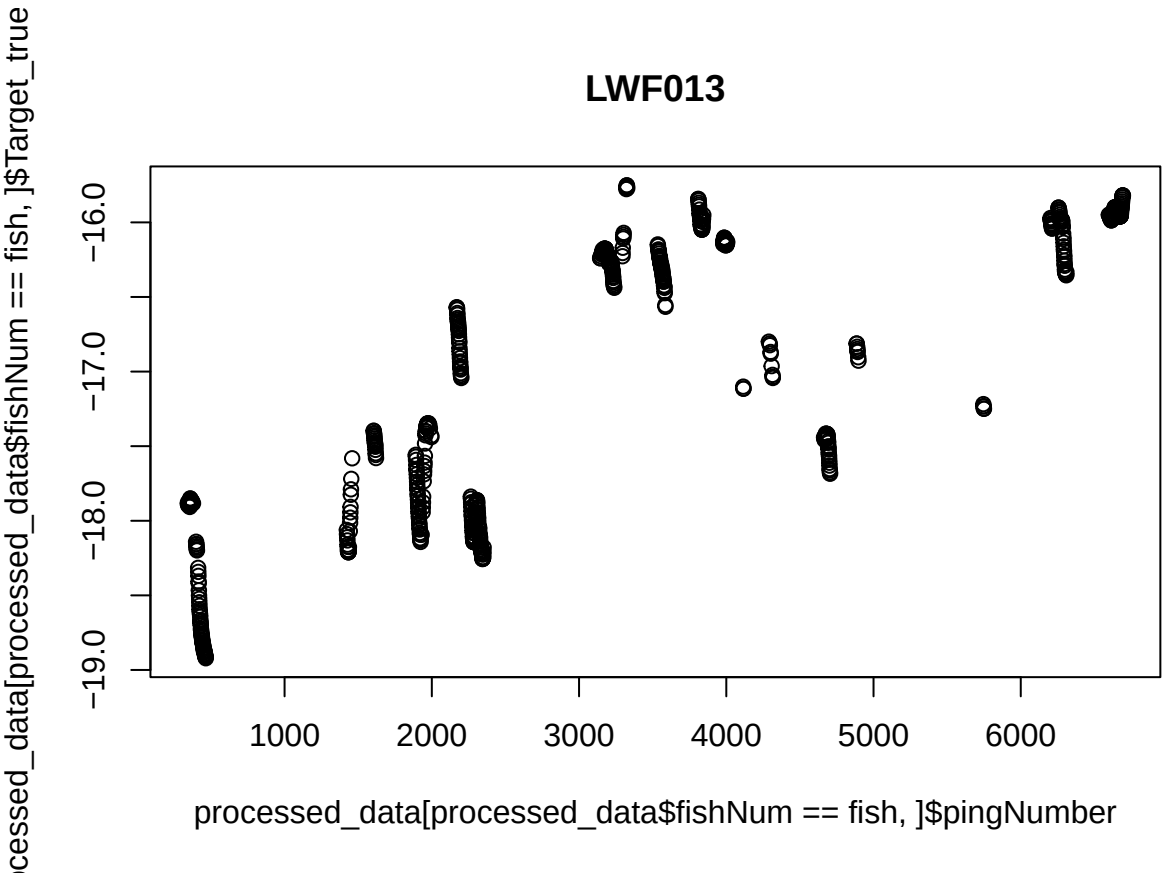

LWF006
cessed_data[processed_data$fishNum == fish,]$Target_true
−9.5
−10.5
−11.5
−12.5
0
2000
4000
6000
8000
10000
processed_data[processed_data$fishNum == fish,]$pingNumber

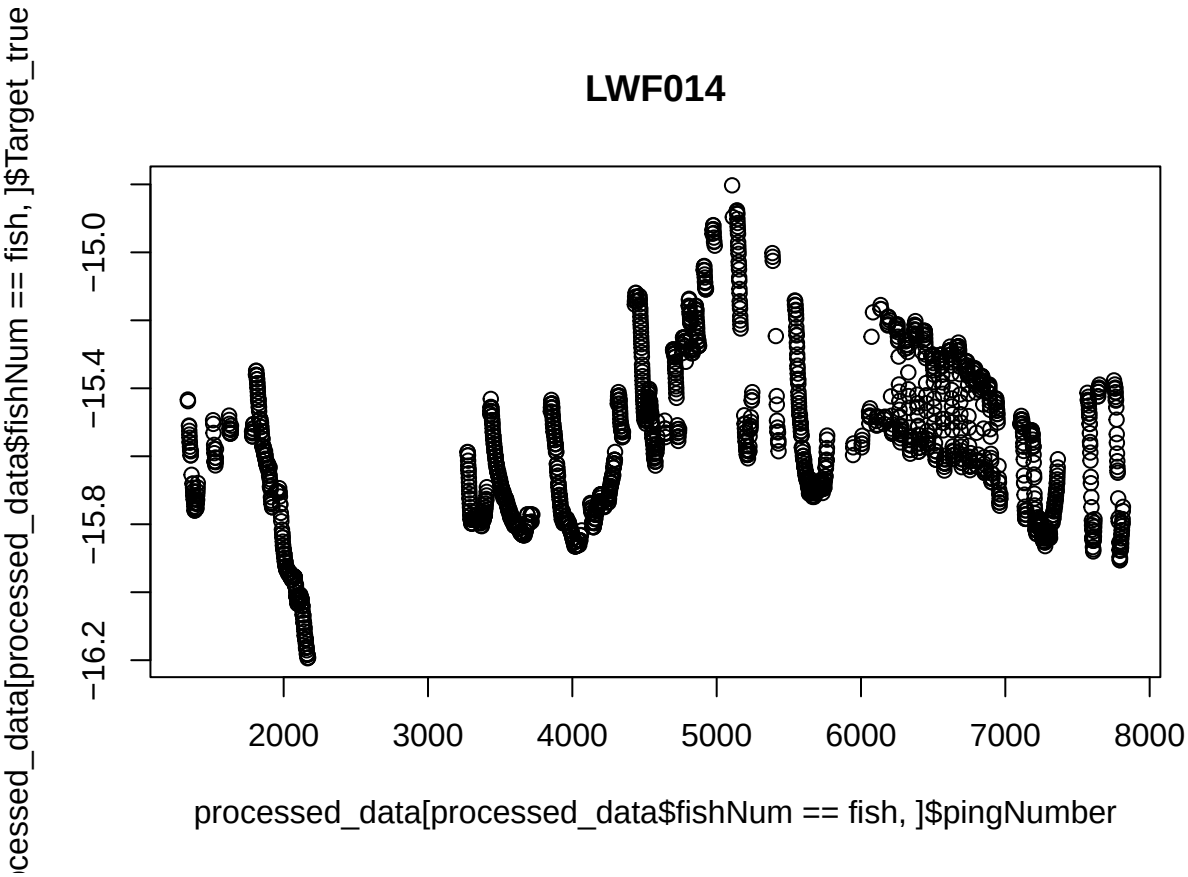

LWF007
cessed_data[processed_data$fishNum == fish,]$Target_true
−14.5
−14.0
−13.5
−13.0
5000
10000
15000
processed_data[processed_data$fishNum == fish,]$pingNumber

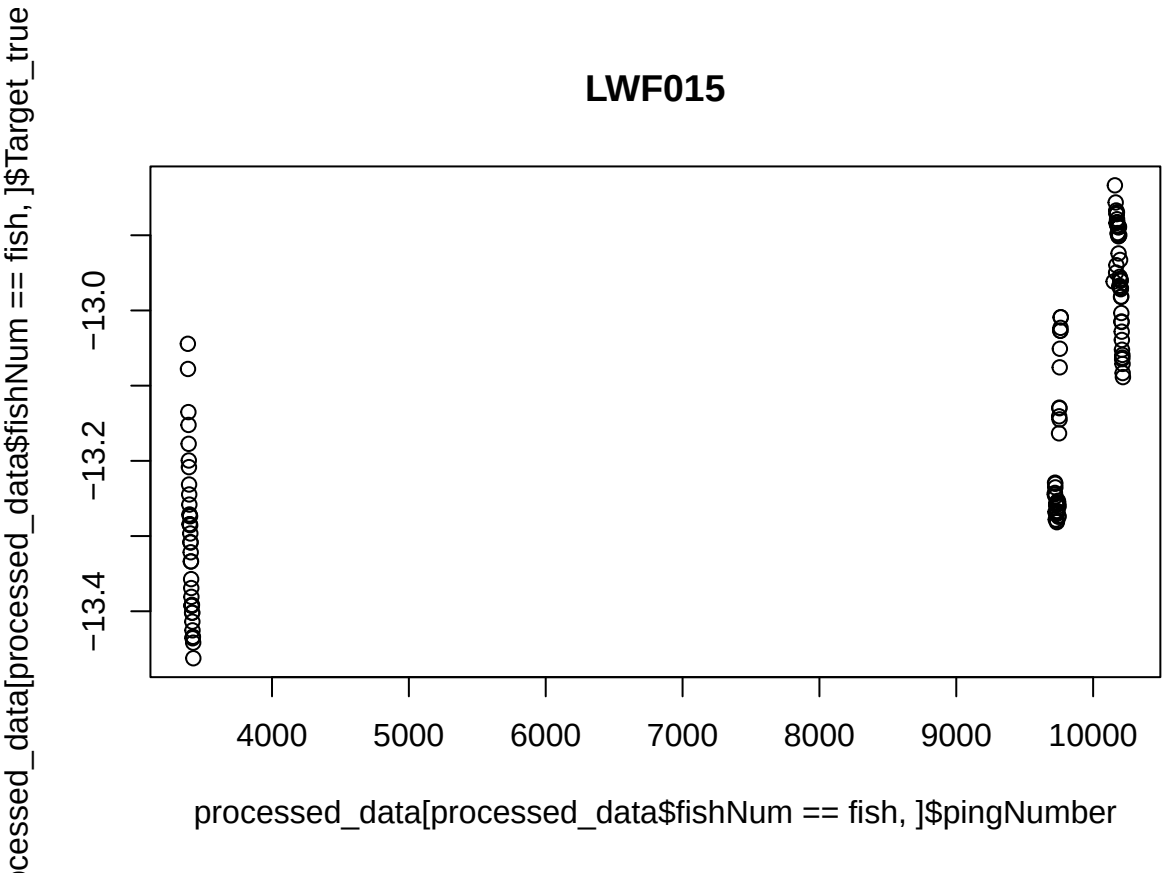

LWF009
cessed_data[processed_data$fishNum == fish,]$Target_true
−13.8
−14.0
−14.2
−14.4
6000
7000
8000
9000
10000
processed_data[processed_data$fishNum == fish,]$pingNumber

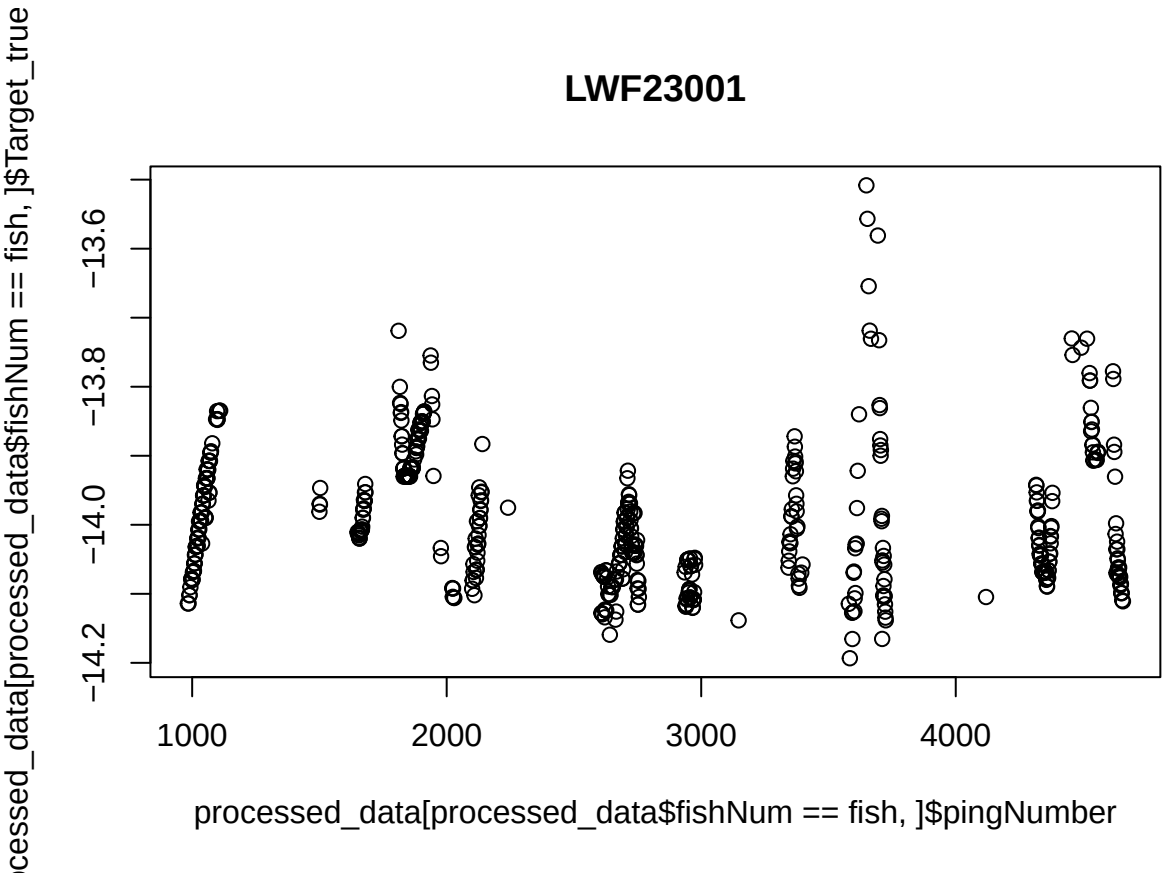

LWF010
−13.5
−14.5
−15.5
0
2000
4000
6000
8000
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

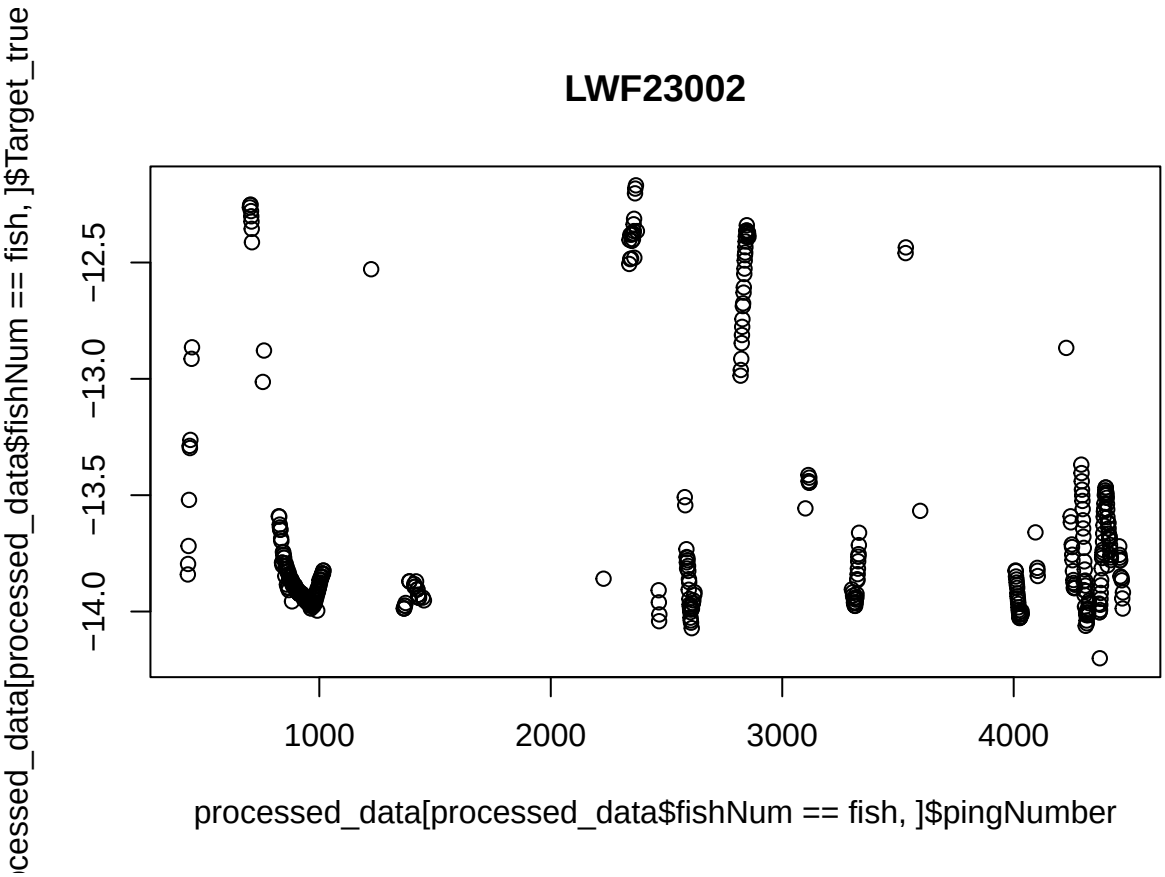

LWF012
cessed_data[processed_data$fishNum == fish,]$Target_true
−12.5
−13.5
−14.5
−15.5
0
2000
4000
6000
8000
processed_data[processed_data$fishNum == fish,]$pingNumber

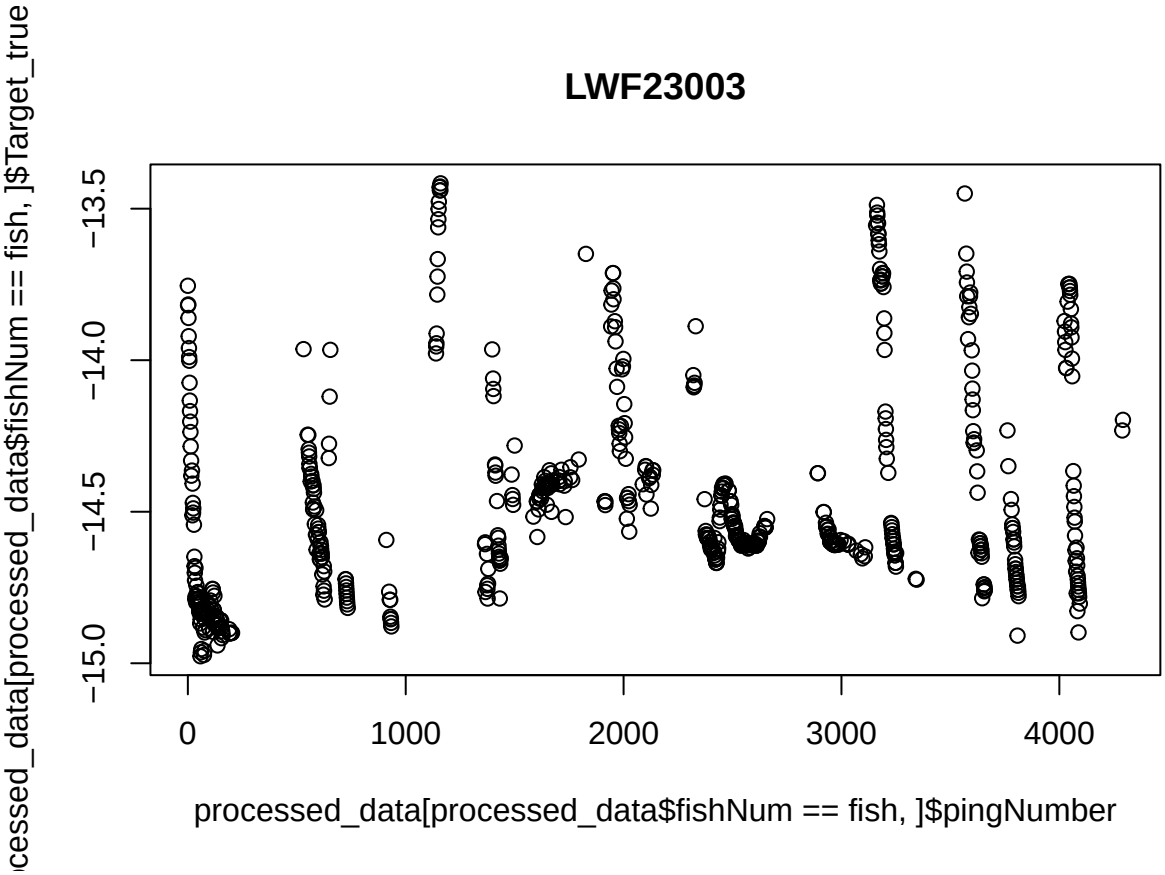

LWF013
cessed_data[processed_data$fishNum == fish,]$Target_true
−16.0
−17.0
−18.0
−19.0
1000
2000
3000
4000
5000
6000
processed_data[processed_data$fishNum == fish,]$pingNumber

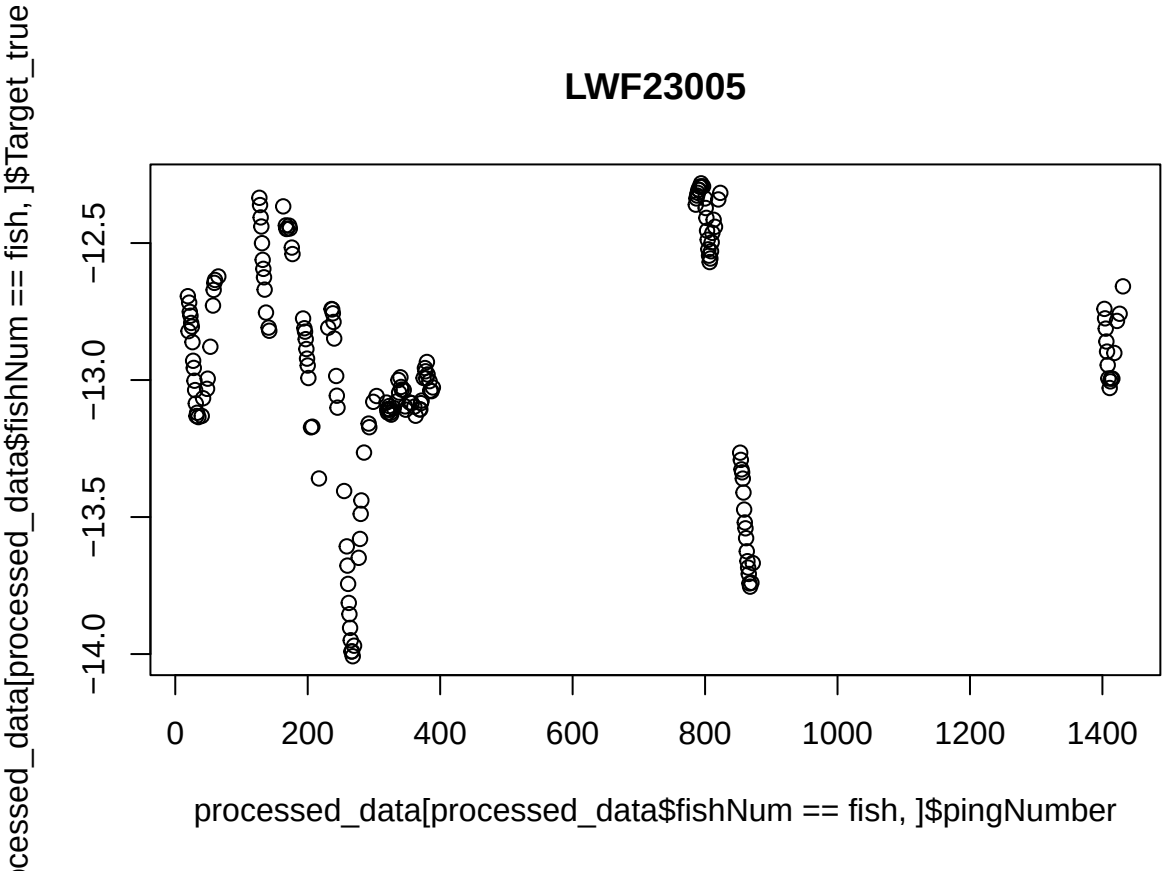

LWF014
cessed_data[processed_data$fishNum == fish,]$Target_true
−16.2
−15.8
−15.4
−15.0
2000
3000
4000
5000
6000
7000
8000
processed_data[processed_data$fishNum == fish,]$pingNumber

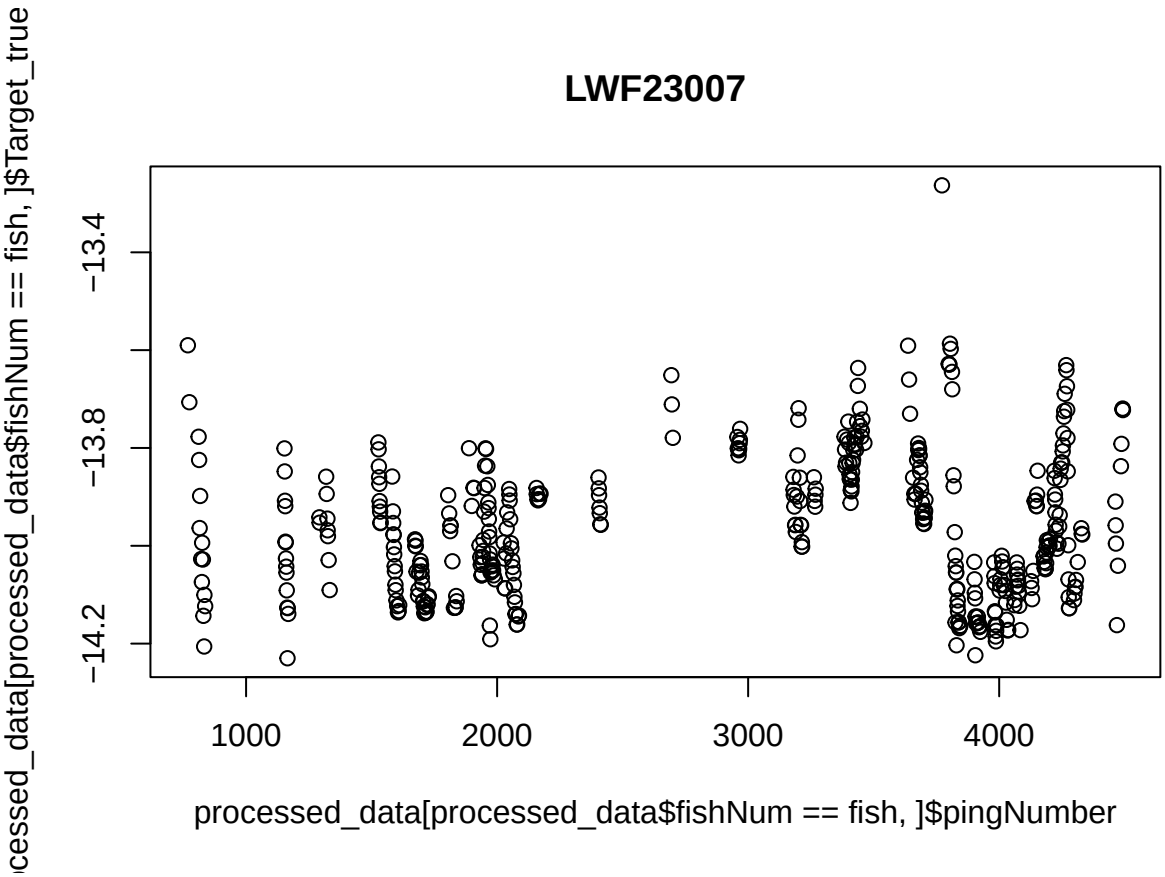

LWF015
cessed_data[processed_data$fishNum == fish,]$Target_true
−13.4
−13.2
−13.0
4000
5000
6000
7000
8000
9000
10000
processed_data[processed_data$fishNum == fish,]$pingNumber

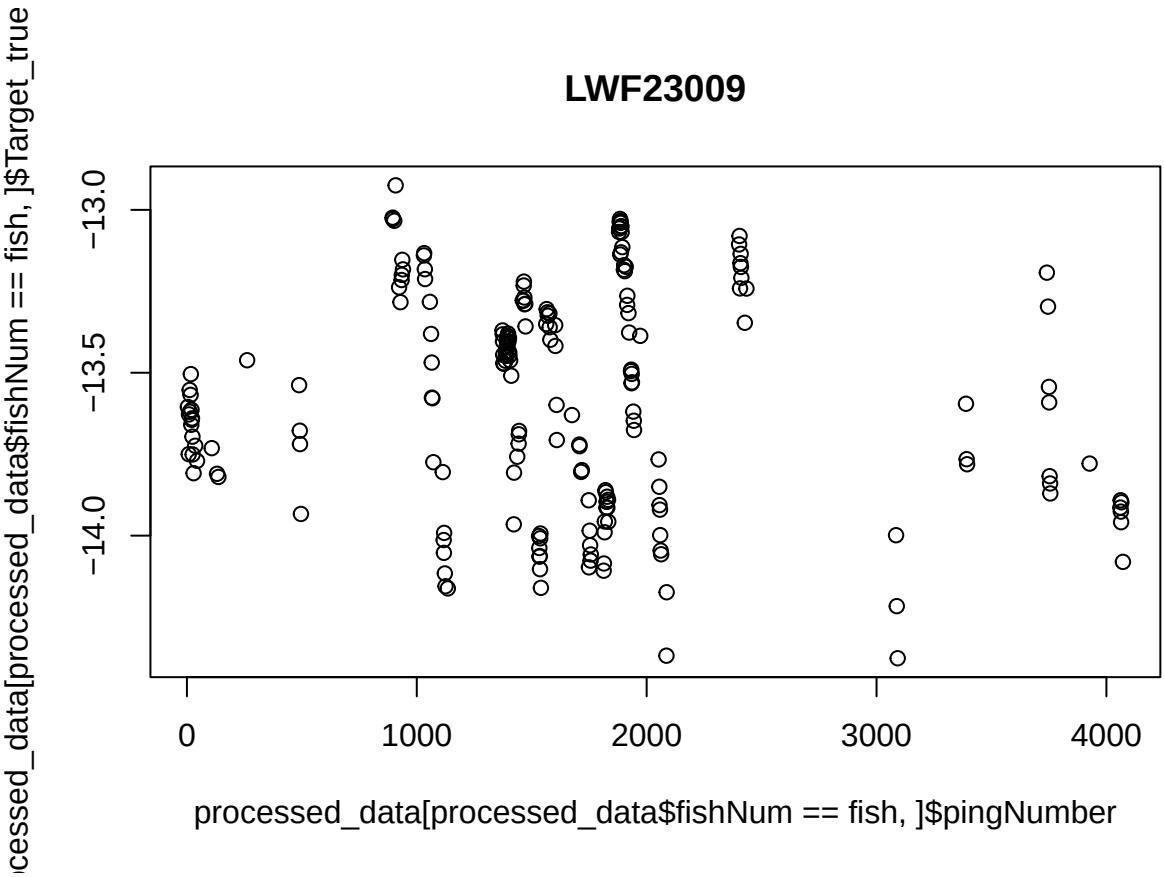

LWF23001
cessed_data[processed_data$fishNum == fish,]$Target_true
−14.2
−14.0
−13.8
−13.6
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

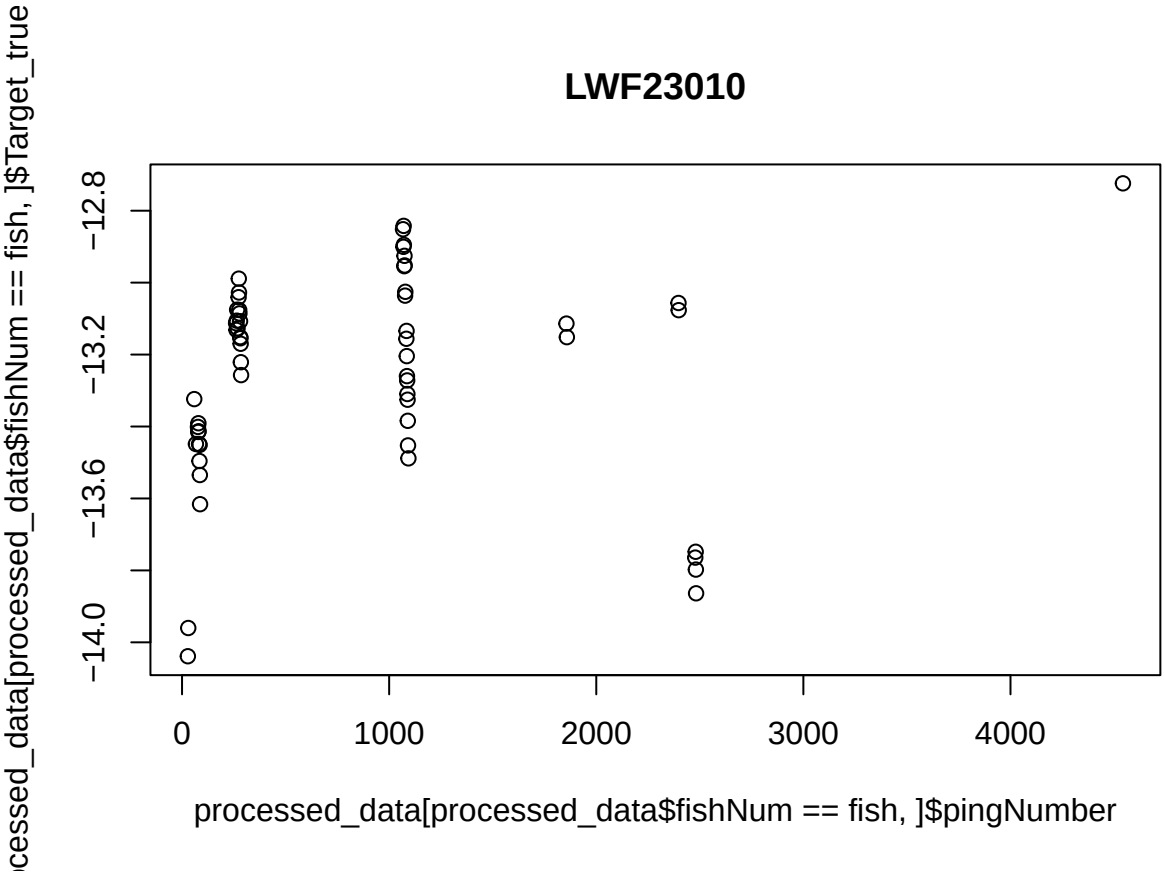

LWF23002
−14.0
−13.5
−13.0
−12.5
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

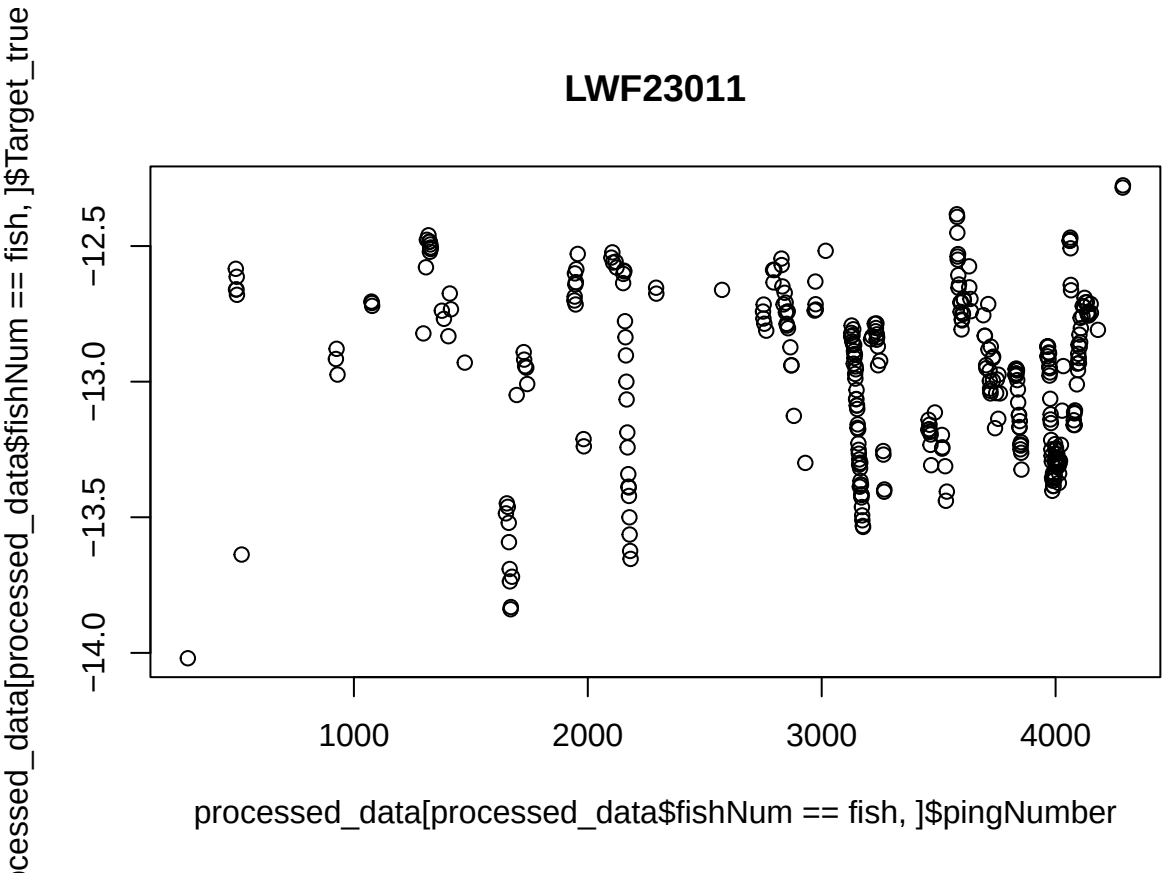

LWF23003
−15.0
−14.5
−14.0
−13.5
0
1000
2000
3000
4000
cessed_data[processed_data$fishNum == fish,]$Target_true
processed_data[processed_data$fishNum == fish,]$pingNumber

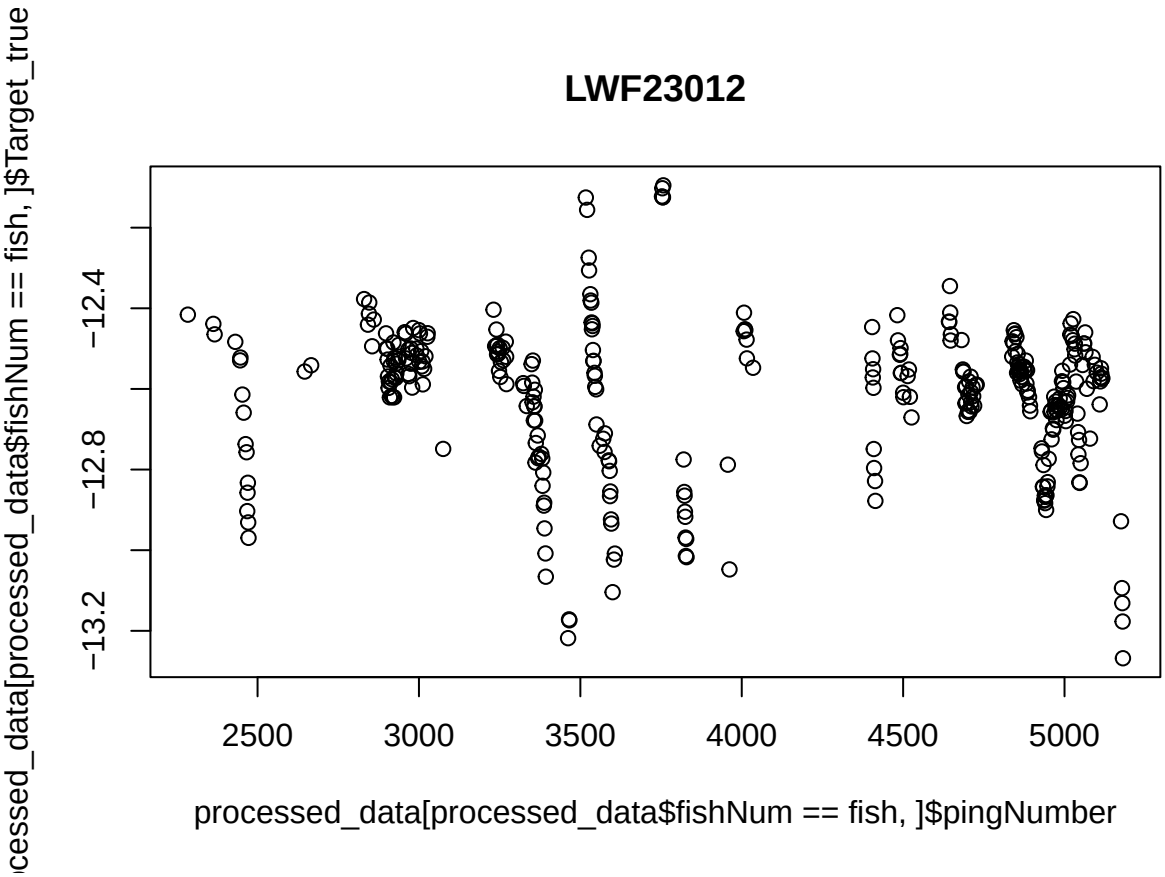

LWF23005
cessed_data[processed_data$fishNum == fish,]$Target_true
−12.5
−13.0
−13.5
−14.0
0
200
400
600
800
1000
1200
1400
processed_data[processed_data$fishNum == fish,]$pingNumber

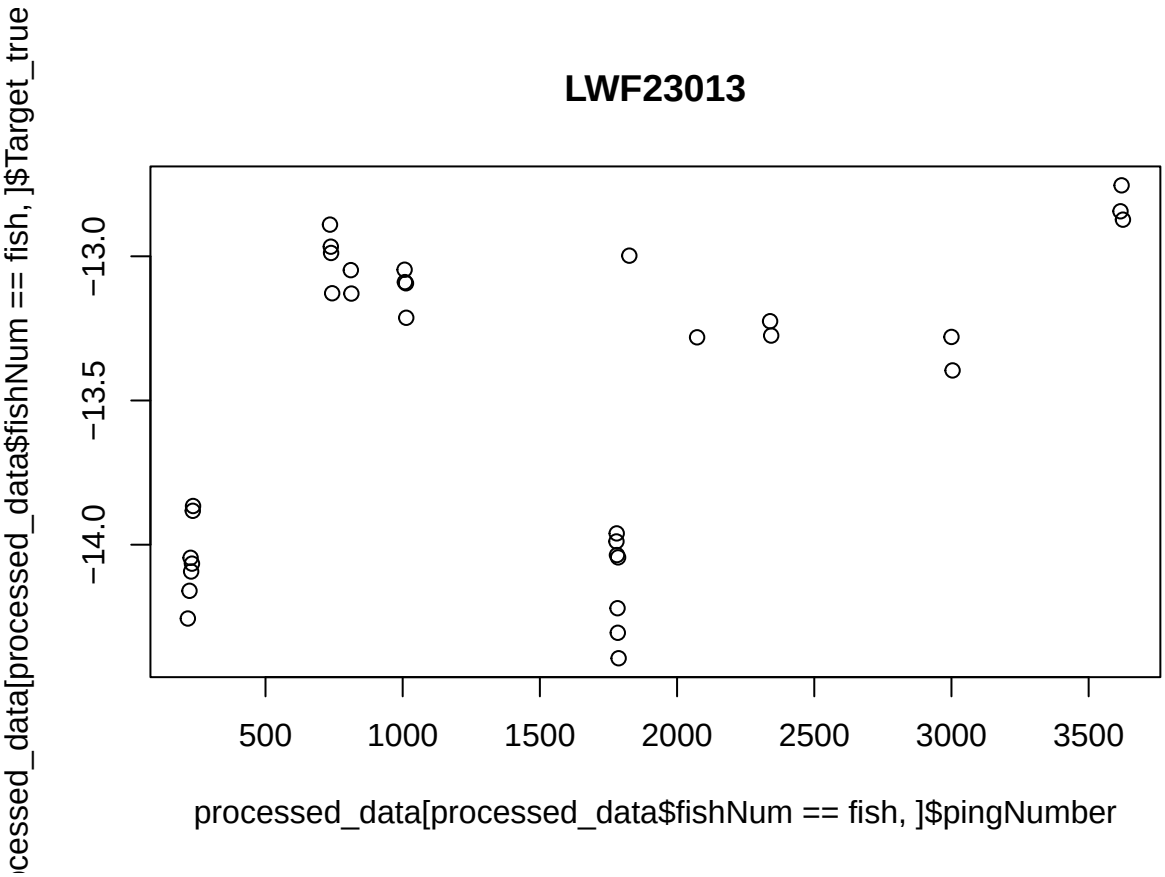

LWF23007
−13.4
−13.8
−14.2
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

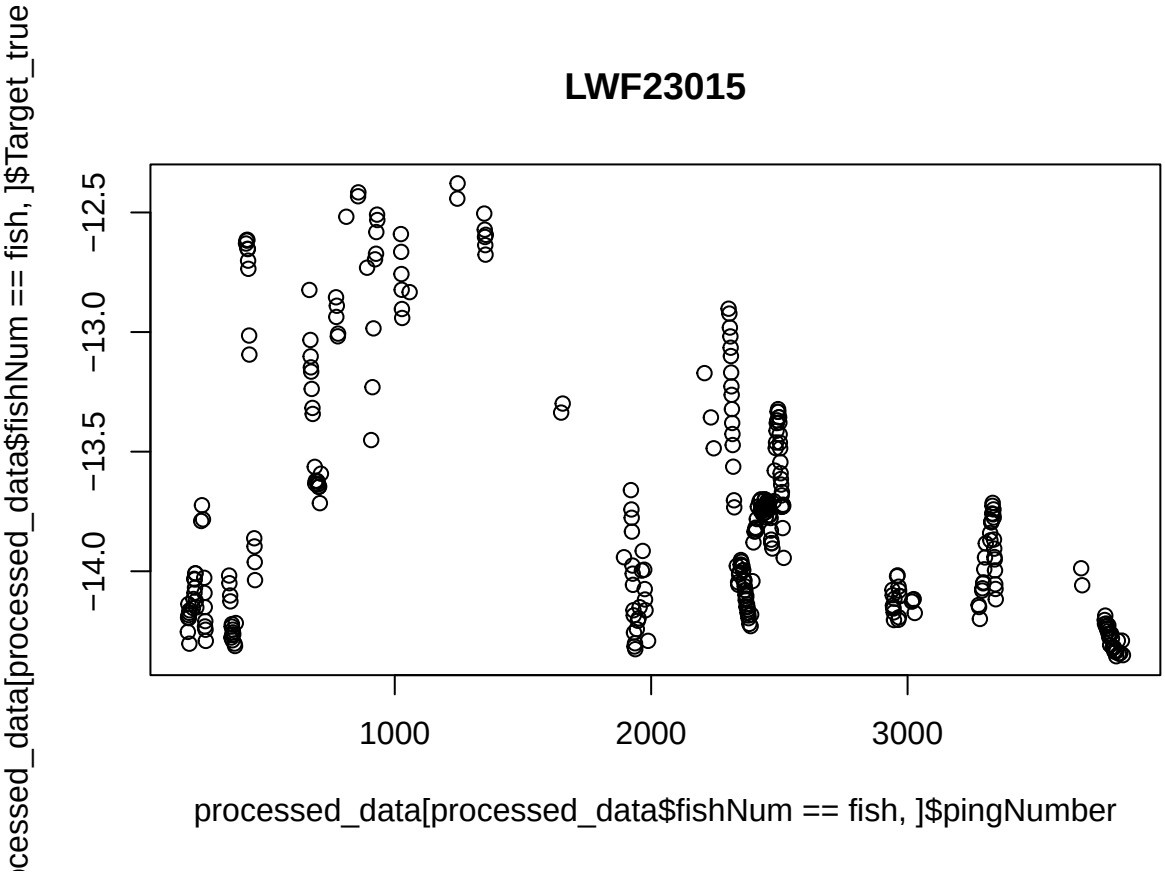

LWF23009
−13.0
−13.5
−14.0
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

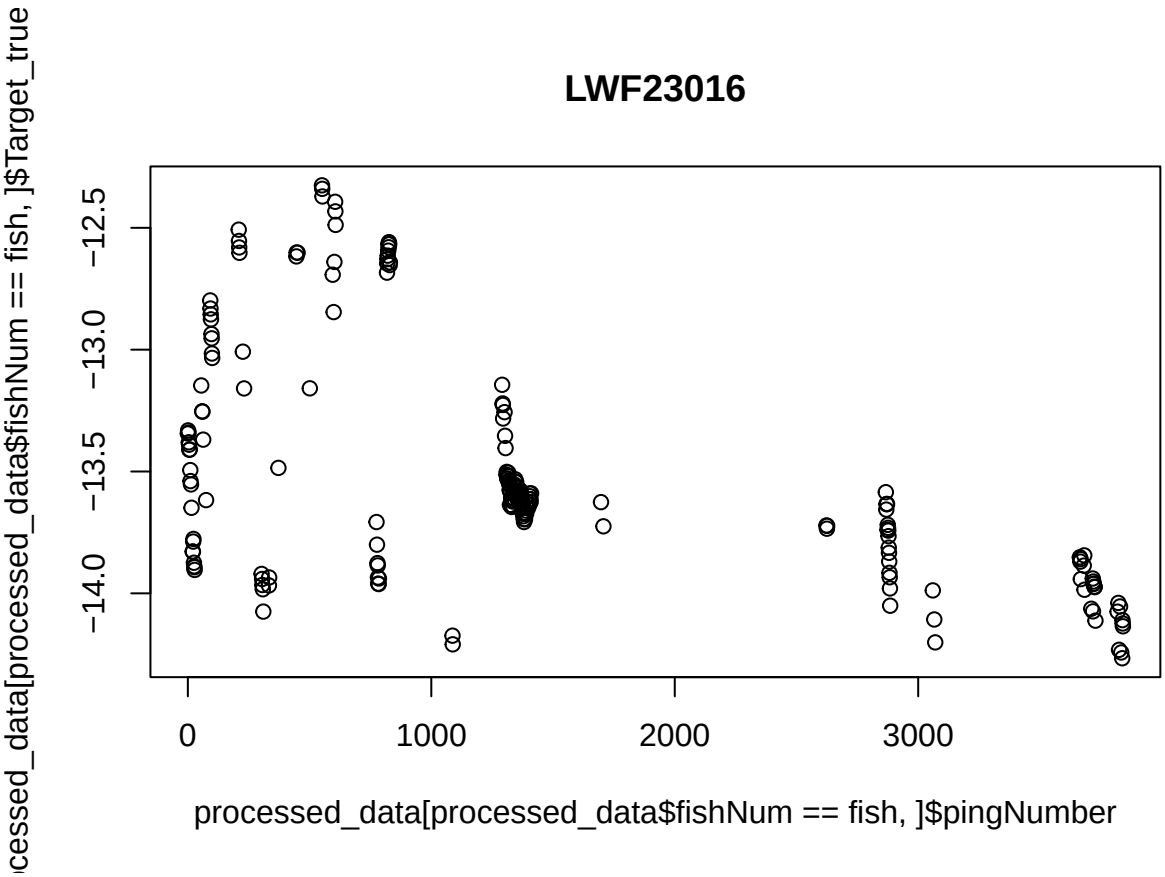

LWF23010
cessed_data[processed_data$fishNum == fish,]$Target_true
−12.8
−13.2
−13.6
−14.0
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

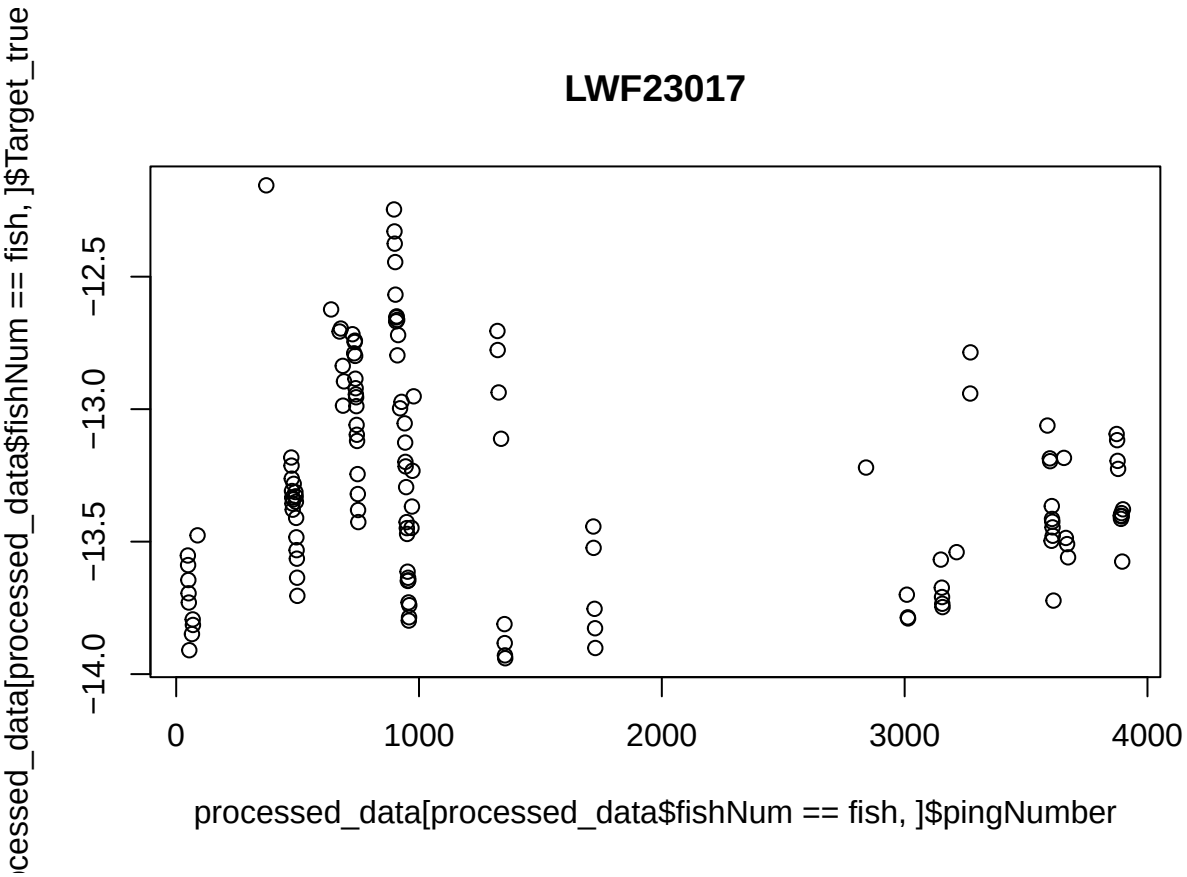

LWF23011
cessed_data[processed_data$fishNum == fish,]$Target_true
−14.0
−13.5
−13.0
−12.5
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

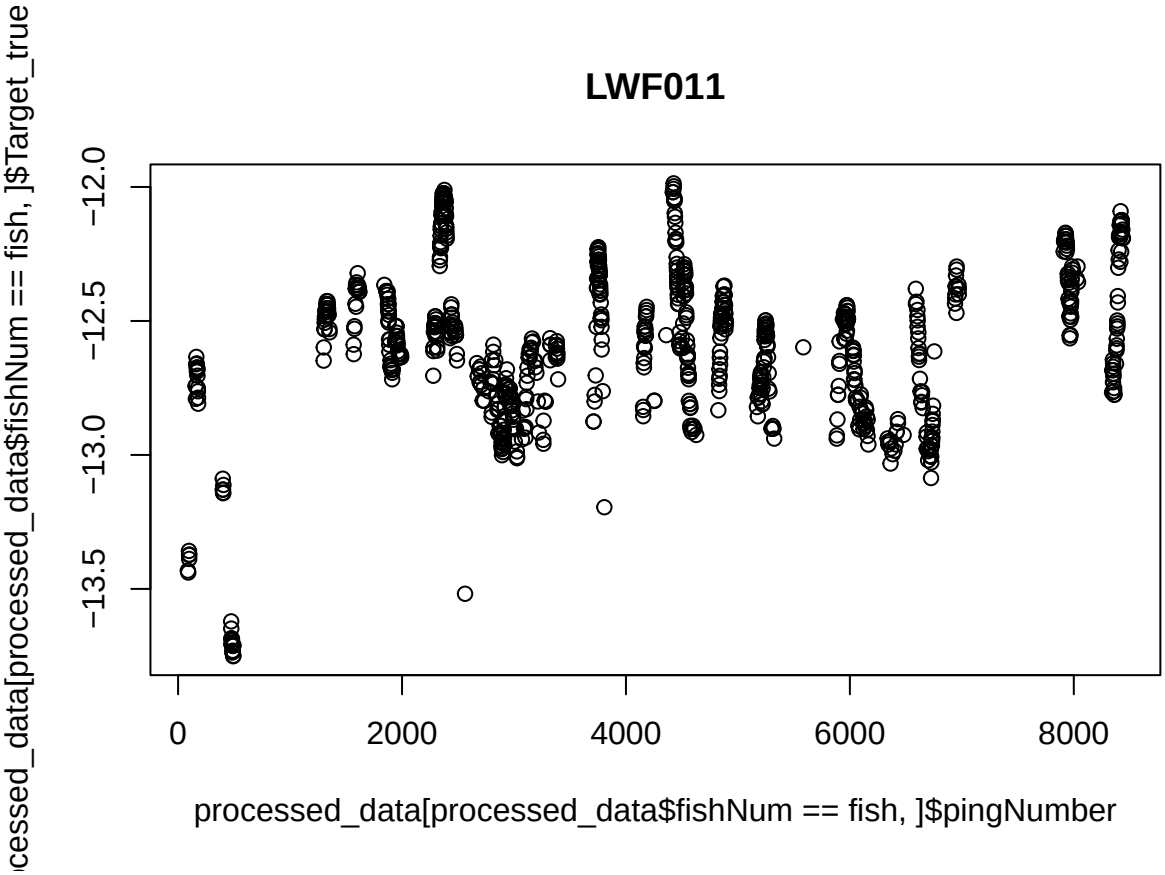

LWF23012
cessed_data[processed_data$fishNum == fish,]$Target_true
−13.2
−12.8
−12.4
2500
3000
3500
4000
4500
5000
processed_data[processed_data$fishNum == fish,]$pingNumber


LWF23013
cessed_data[processed_data$fishNum == fish,]$Target_true
−14.0
−13.5
−13.0
500
1000
1500
2000
2500
3000
3500
processed_data[processed_data$fishNum == fish,]$pingNumber

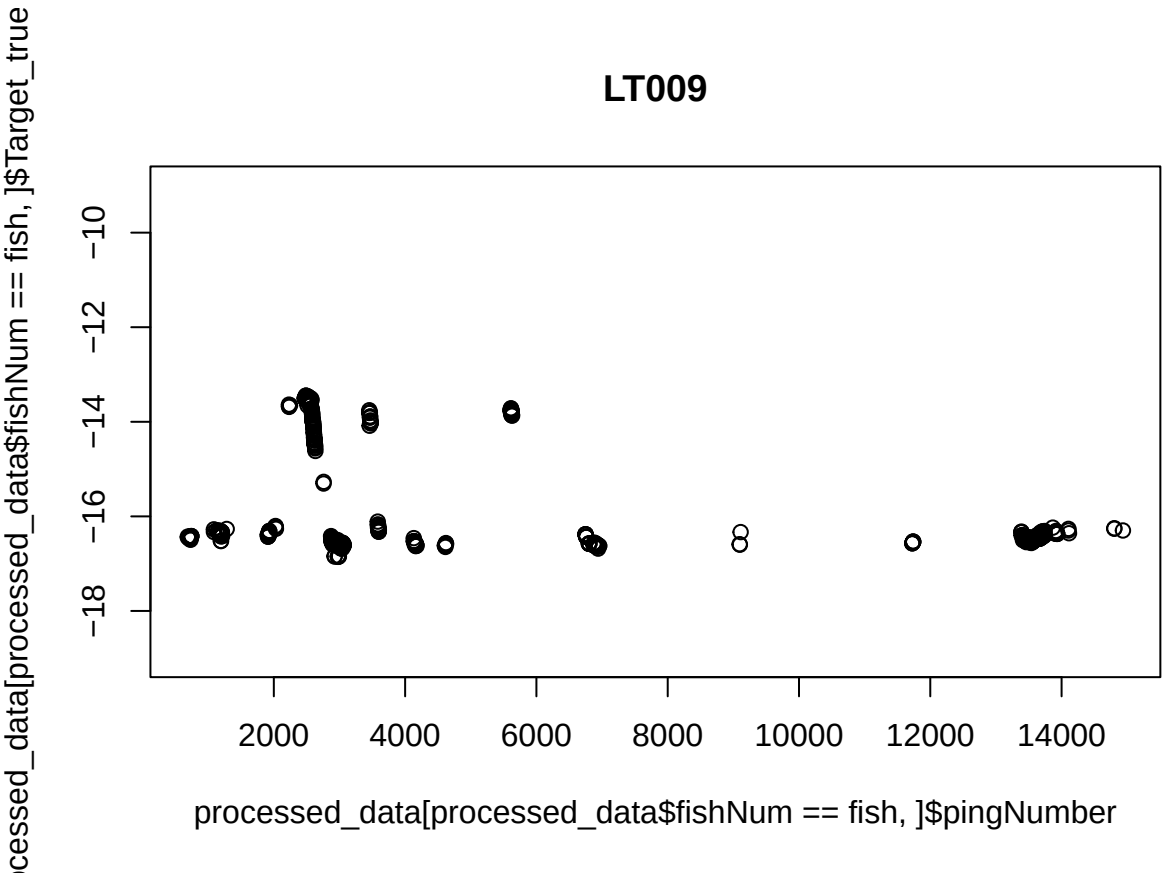

LWF23015
−14.0
−13.5
−13.0
−12.5
1000
2000
3000
cessed_data[processed_data$fishNum == fish,]$Target_true
processed_data[processed_data$fishNum == fish,]$pingNumber

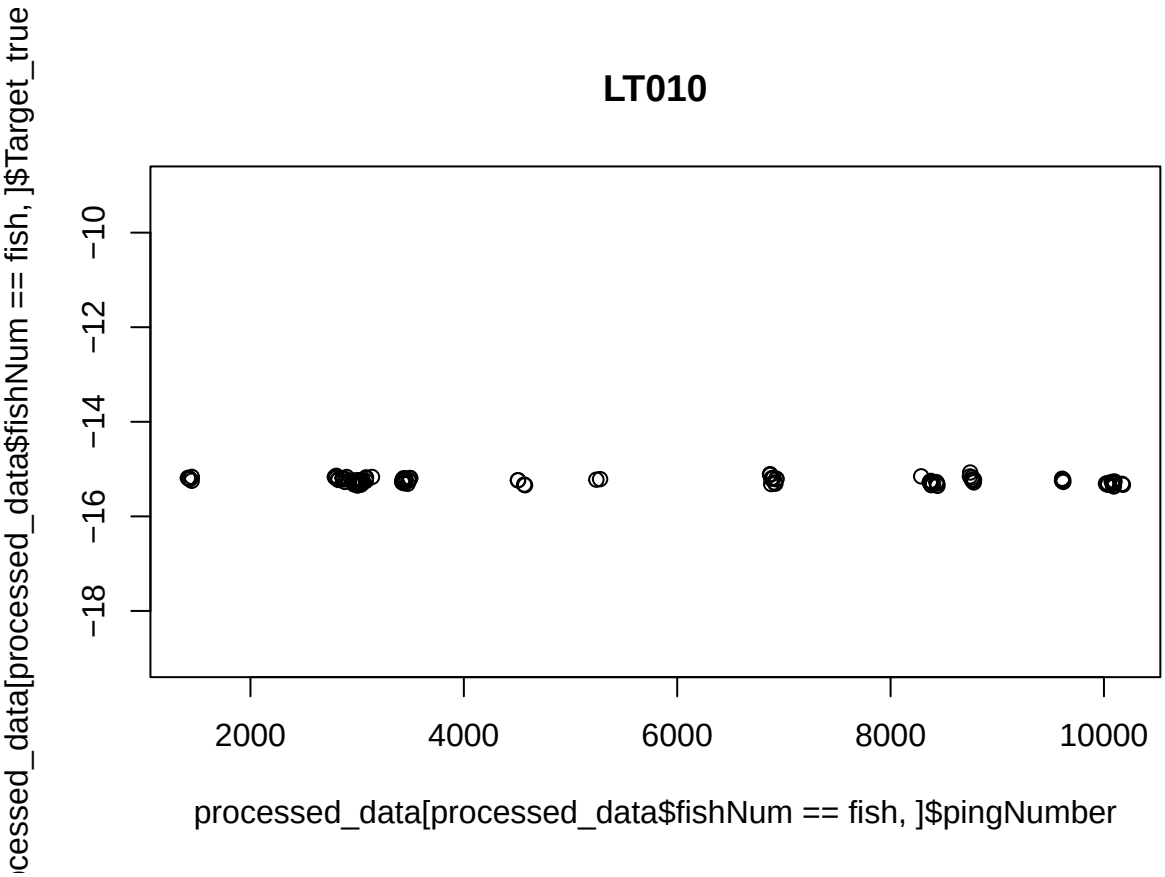

LWF23016
cessed_data[processed_data$fishNum == fish,]$Target_true
−12.5
−13.0
−13.5
−14.0
0
1000
2000
3000
processed_data[processed_data$fishNum == fish,]$pingNumber

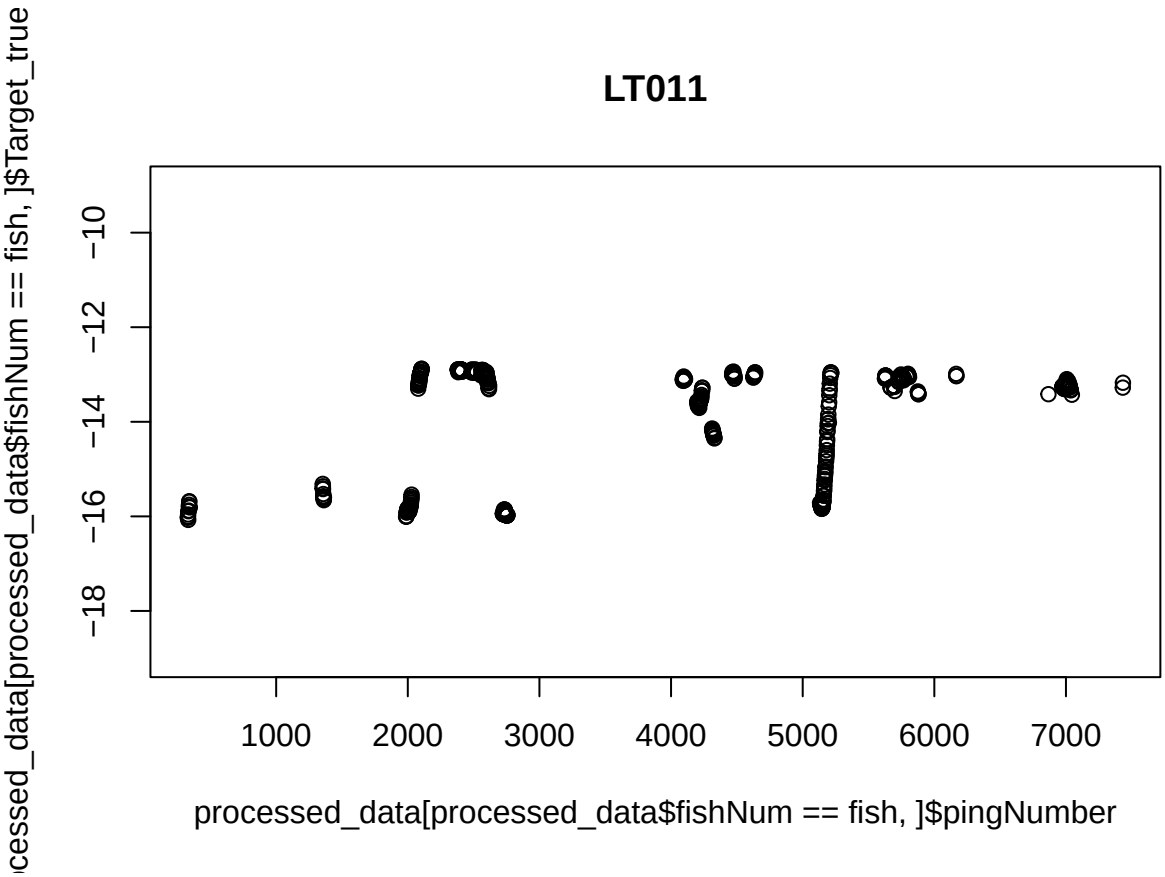

LWF23017
−14.0
−13.5
−13.0
−12.5
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

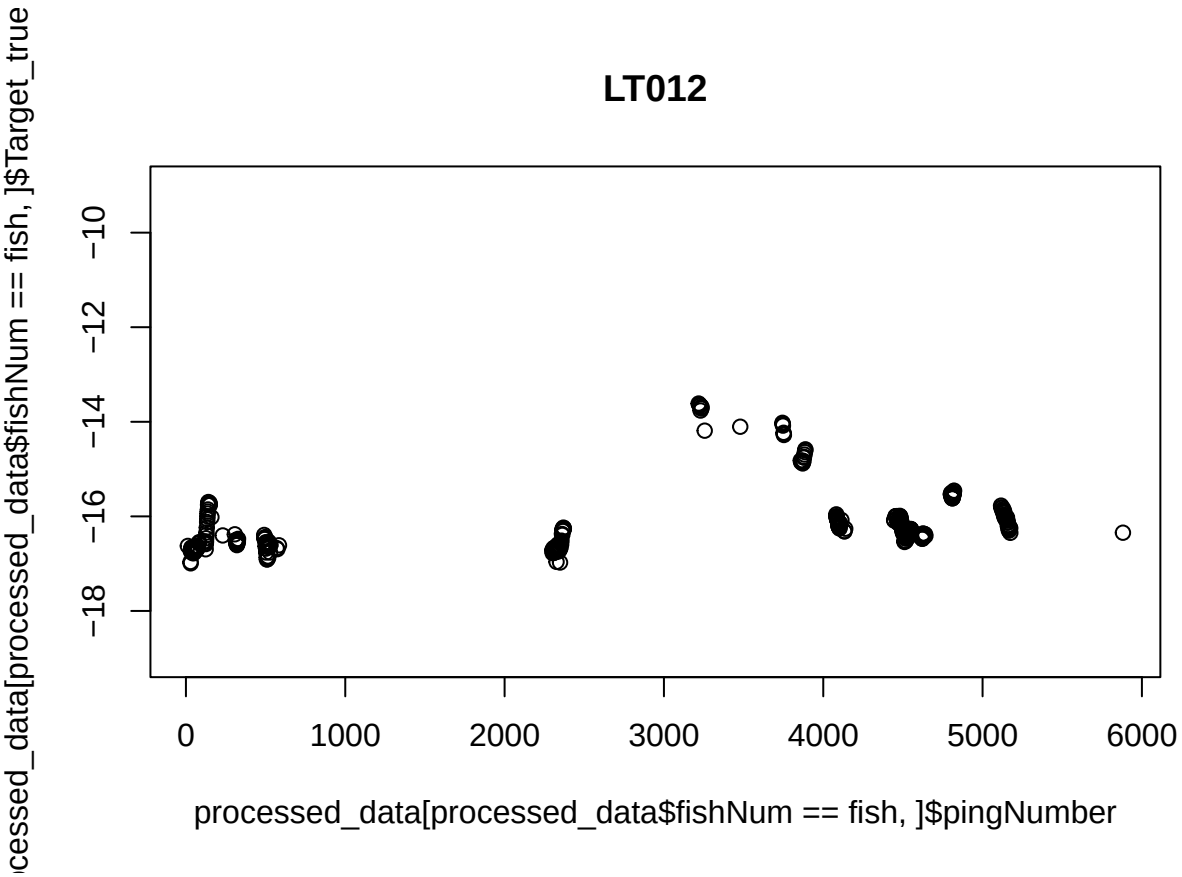


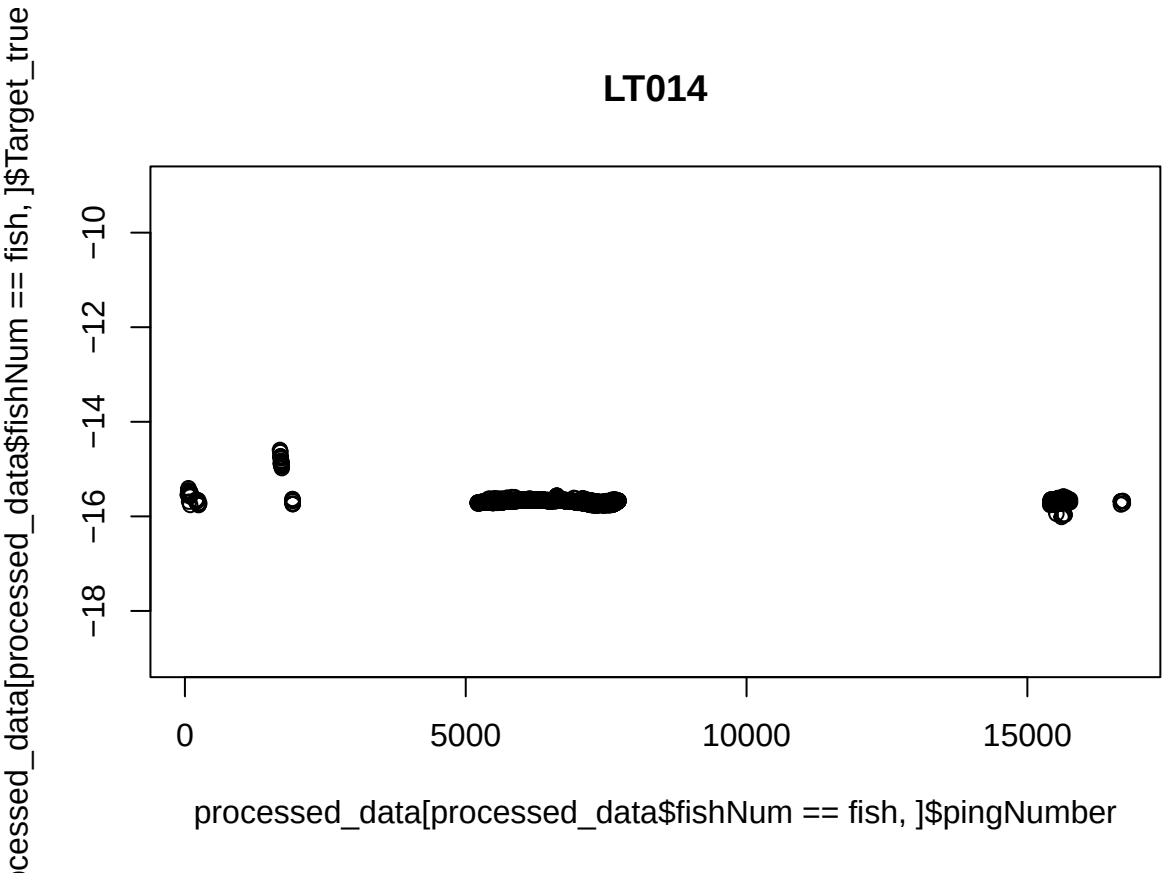

```
# make plots for depth over time with common depth scale
fishes <- unique(processed_data$fishNum)

for (fish in fishes) {
  plot(processed_data[processed_data$fishNum == fish,]$pingNumber, -processed_data[processed_data$fishNu
}
```

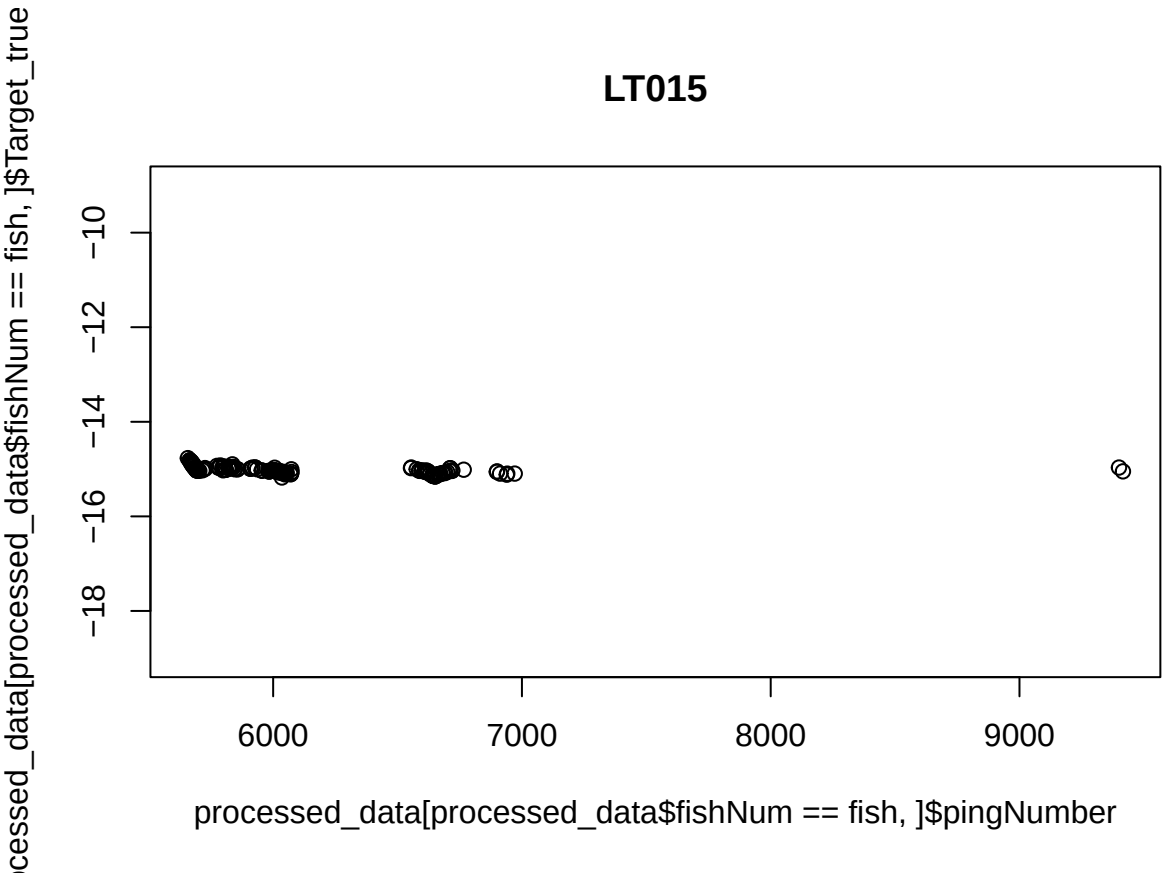

LT009
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
2000
4000
6000
8000
10000
12000
14000
processed_data[processed_data$fishNum == fish,]$pingNumber

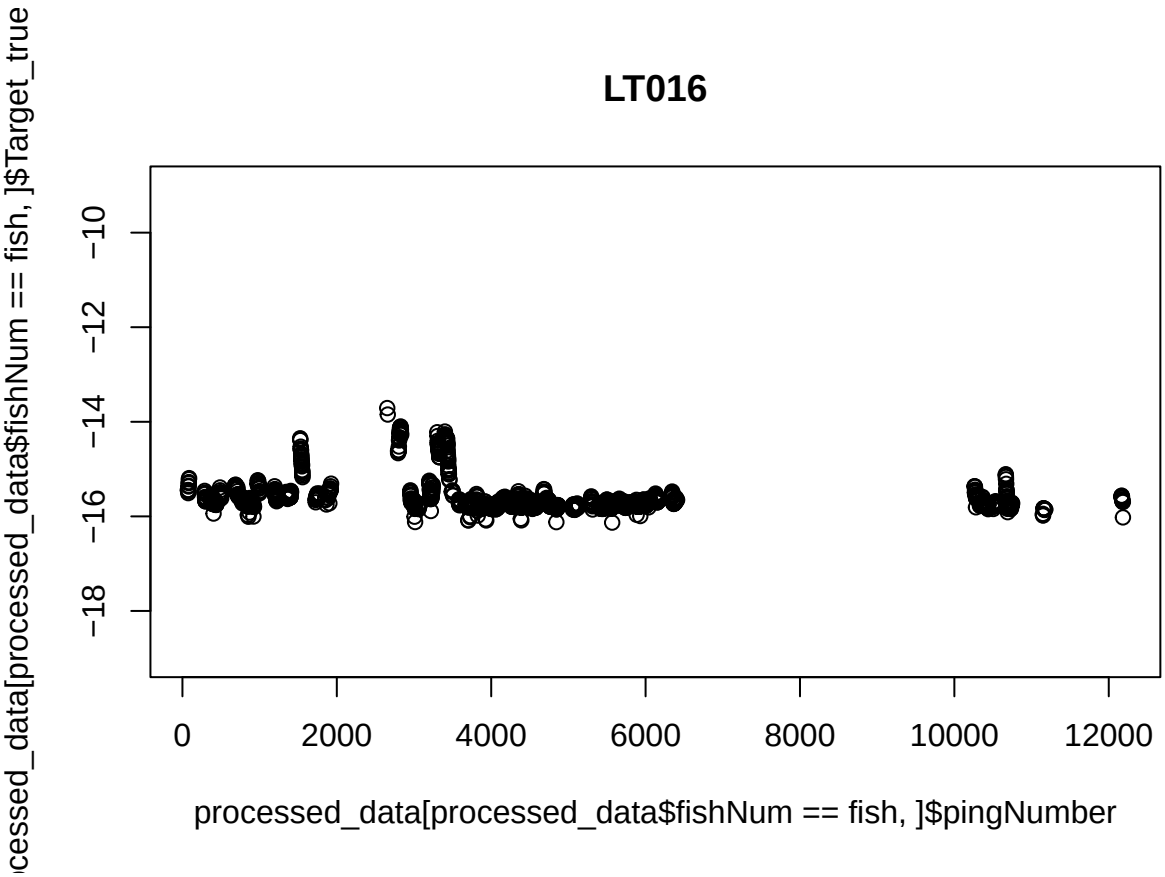

LT010
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
2000
4000
6000
8000
10000
processed_data[processed_data$fishNum == fish,]$pingNumber

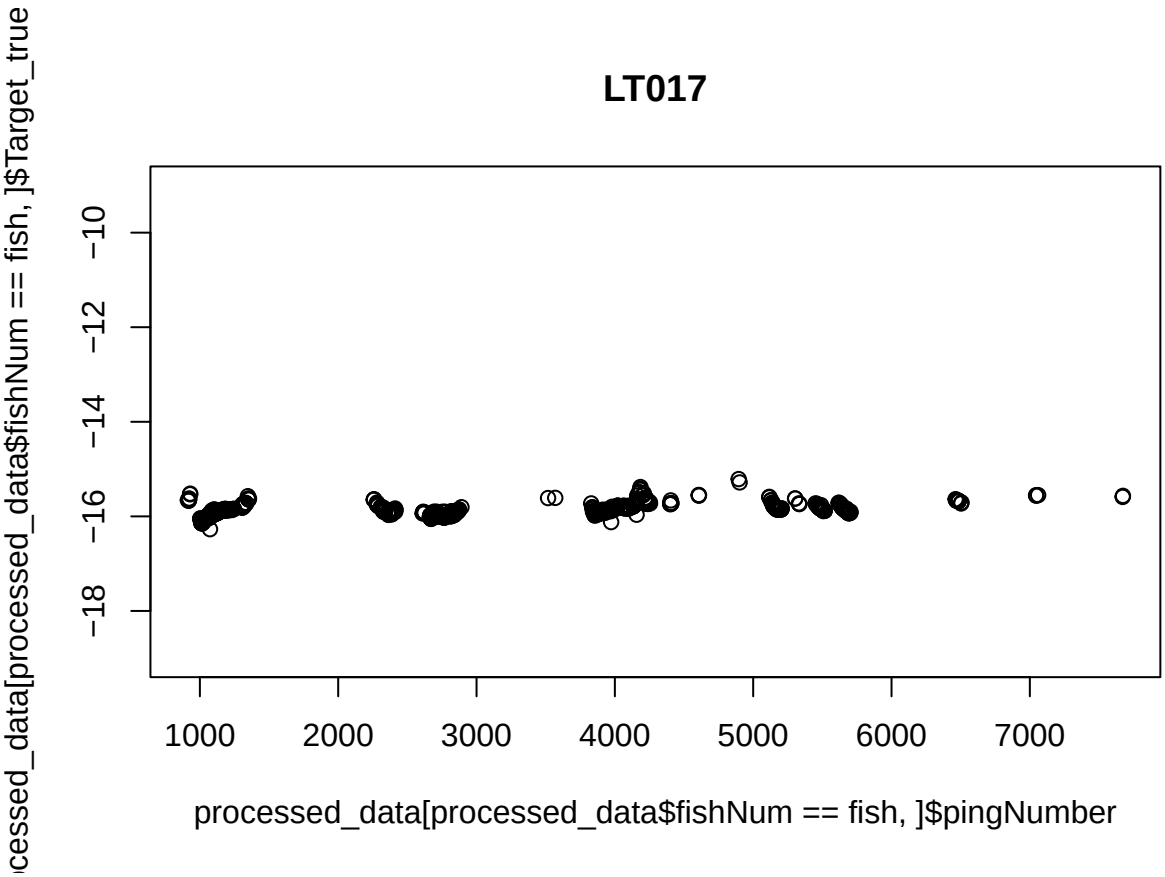

LT011
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
1000
2000
3000
4000
5000
6000
7000
processed_data[processed_data$fishNum == fish,]$pingNumber

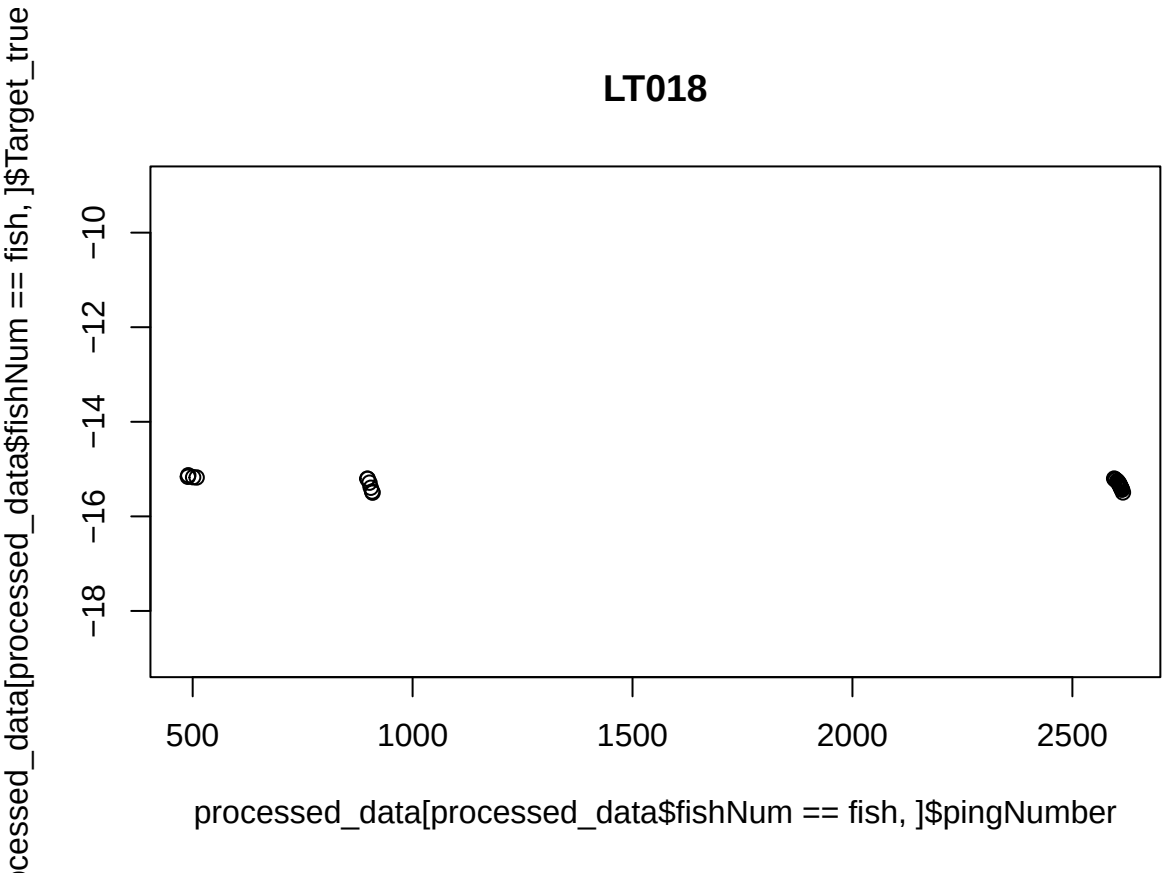

LT012
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
1000
2000
3000
4000
5000
6000
processed_data[processed_data$fishNum == fish,]$pingNumber

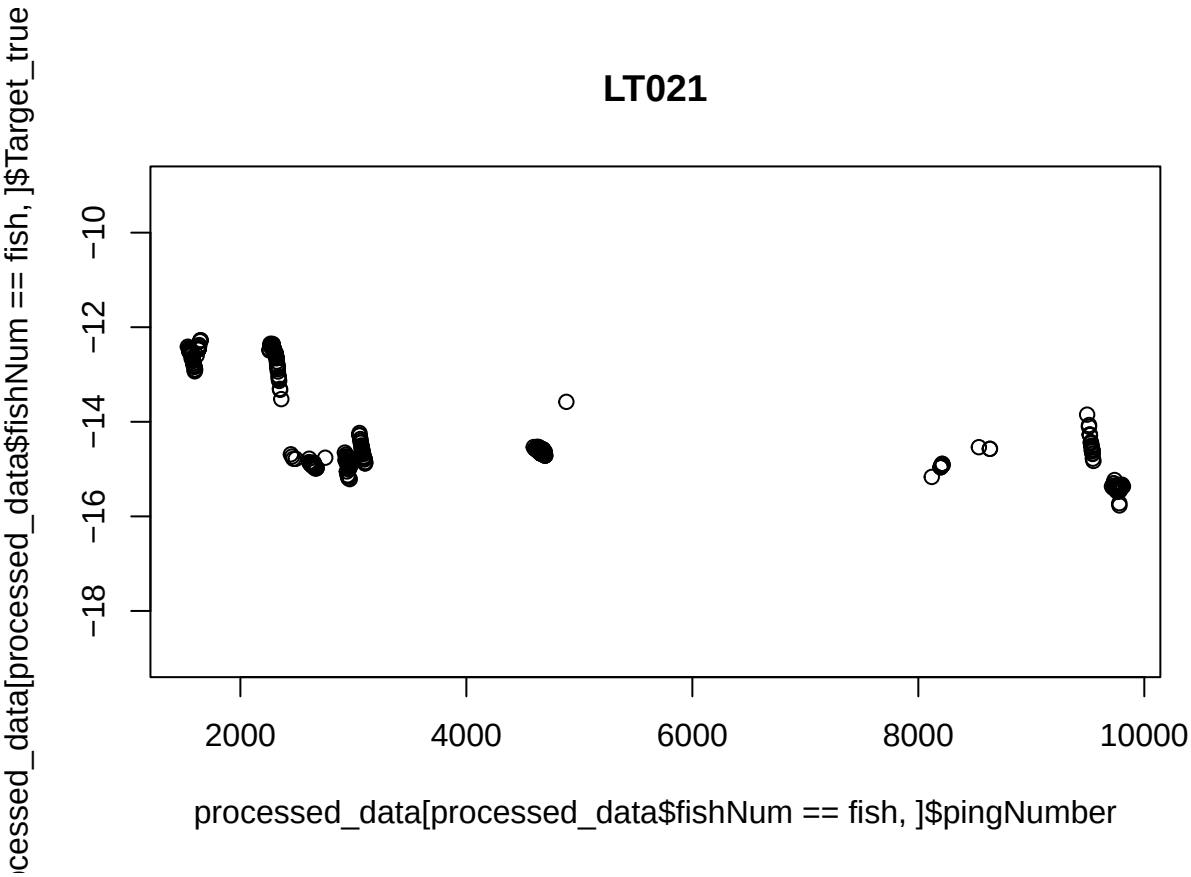

LT014
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
5000
10000
15000
processed_data[processed_data$fishNum == fish,]$pingNumber

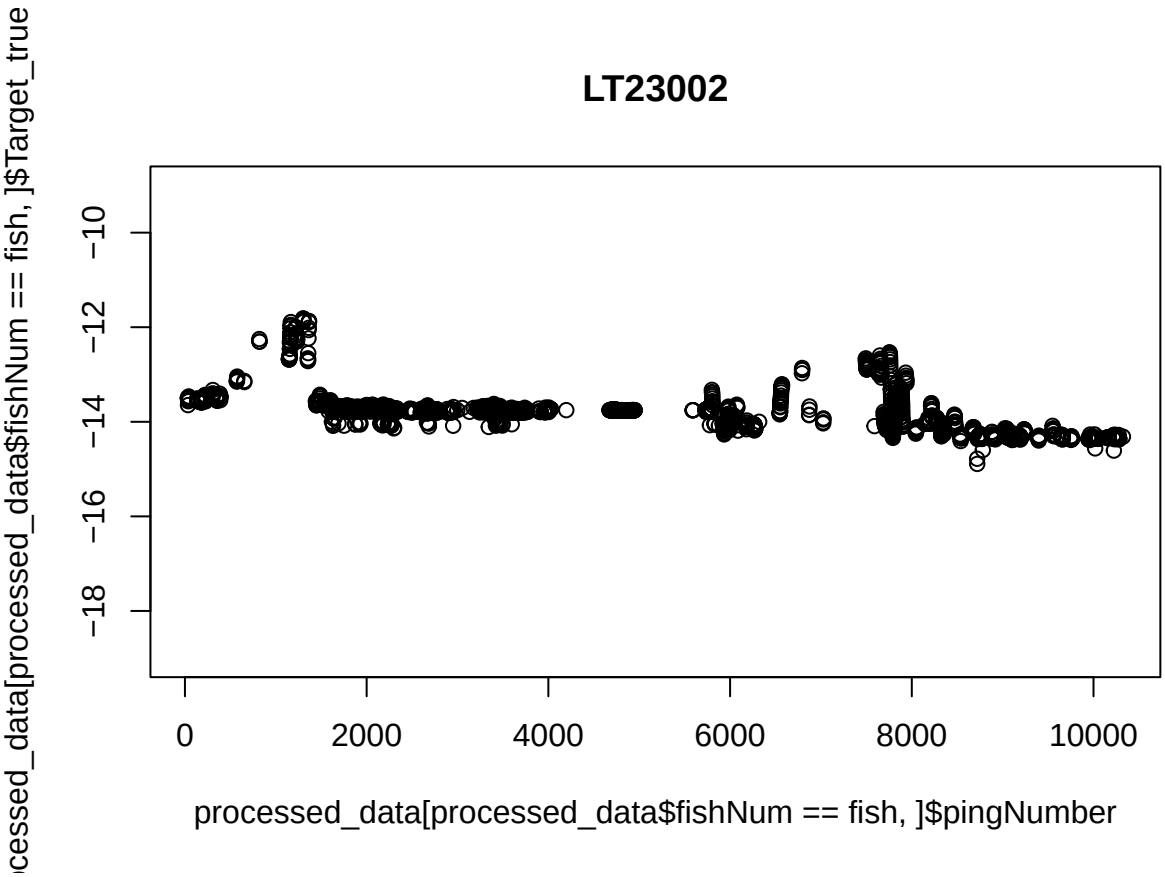

LT015
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
6000
7000
8000
9000
processed_data[processed_data$fishNum == fish,]$pingNumber

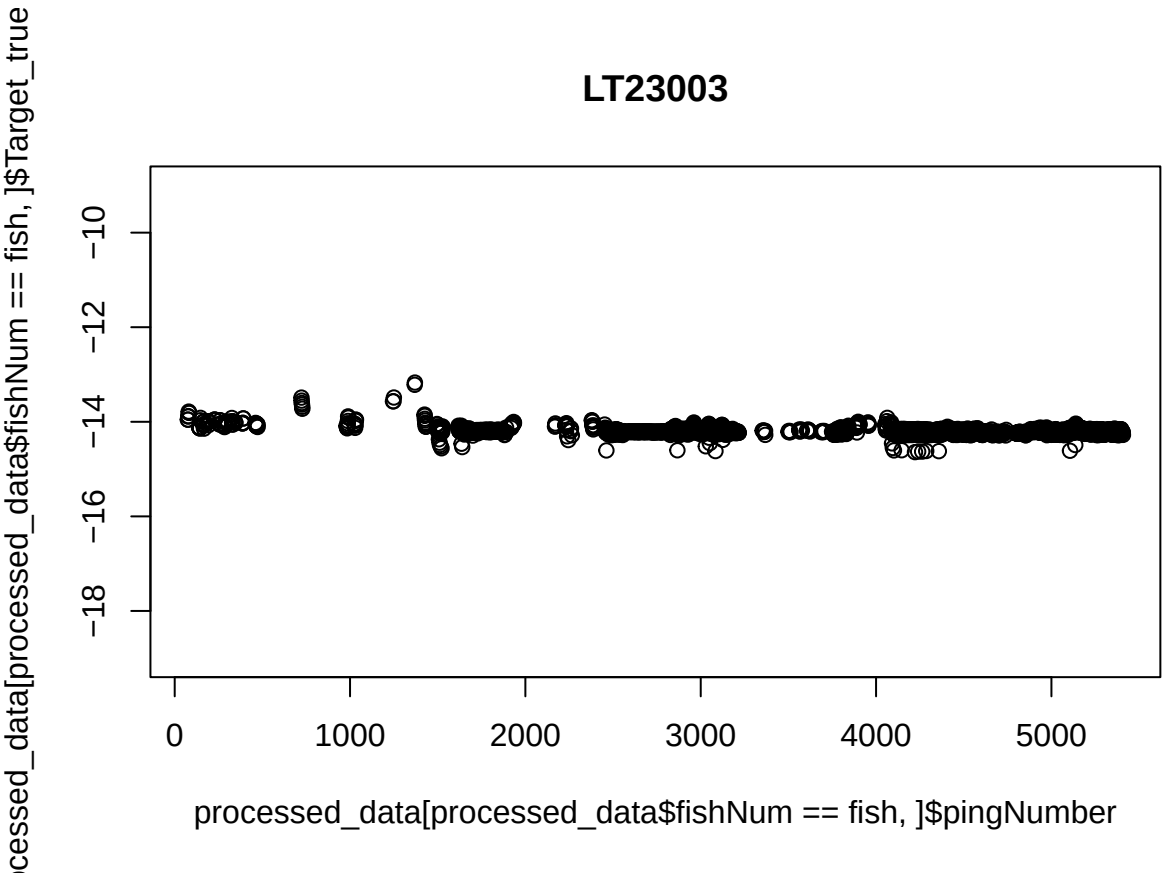

LT016
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
2000
4000
6000
8000
10000
12000
processed_data[processed_data$fishNum == fish,]$pingNumber

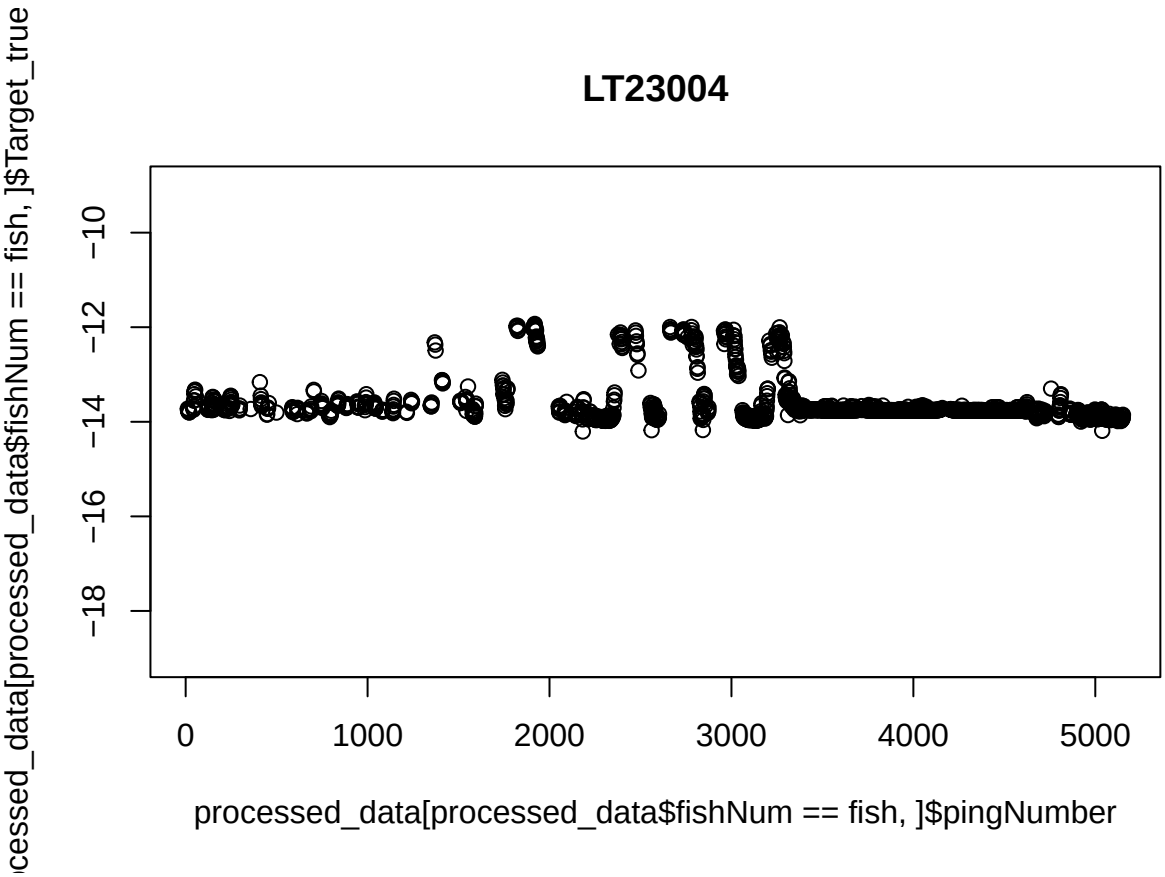

LT017
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
1000
2000
3000
4000
5000
6000
7000
processed_data[processed_data$fishNum == fish,]$pingNumber

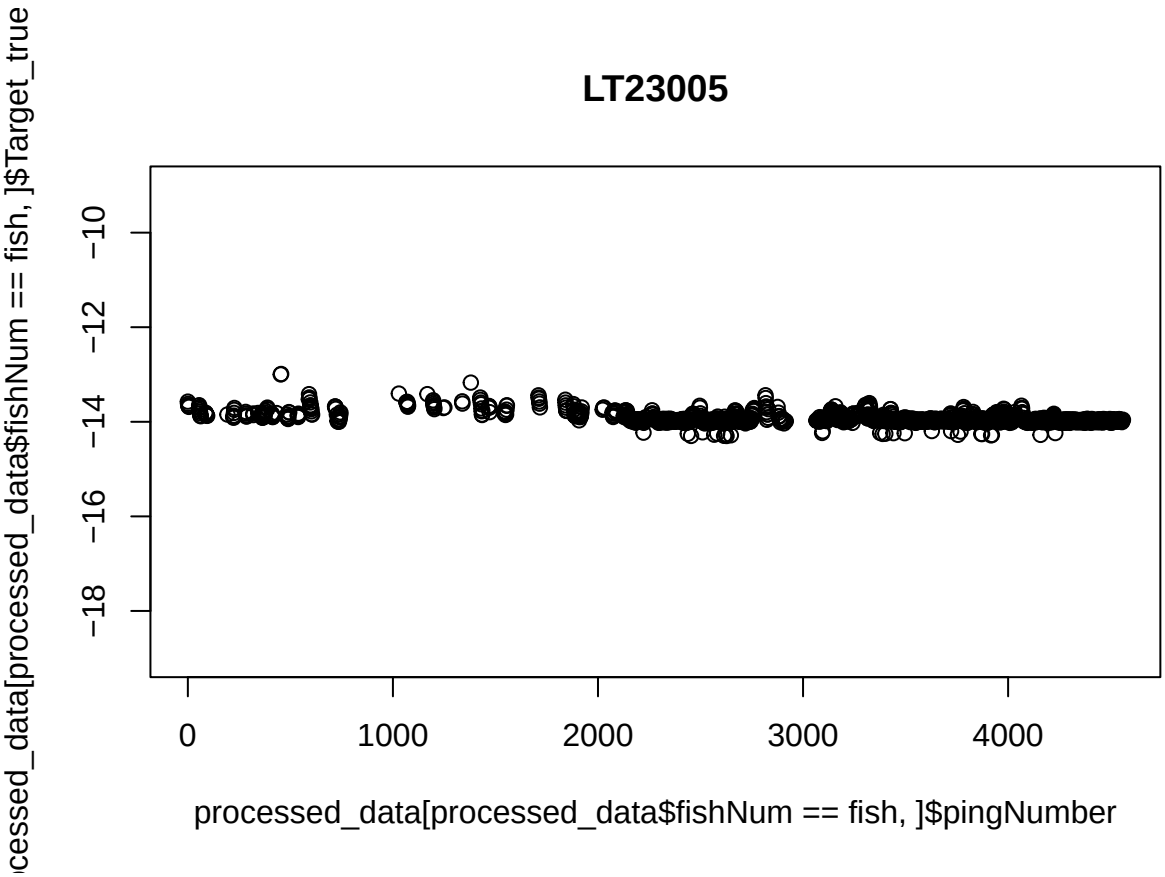

LT018
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
500
1000
1500
2000
2500
processed_data[processed_data$fishNum == fish,]$pingNumber

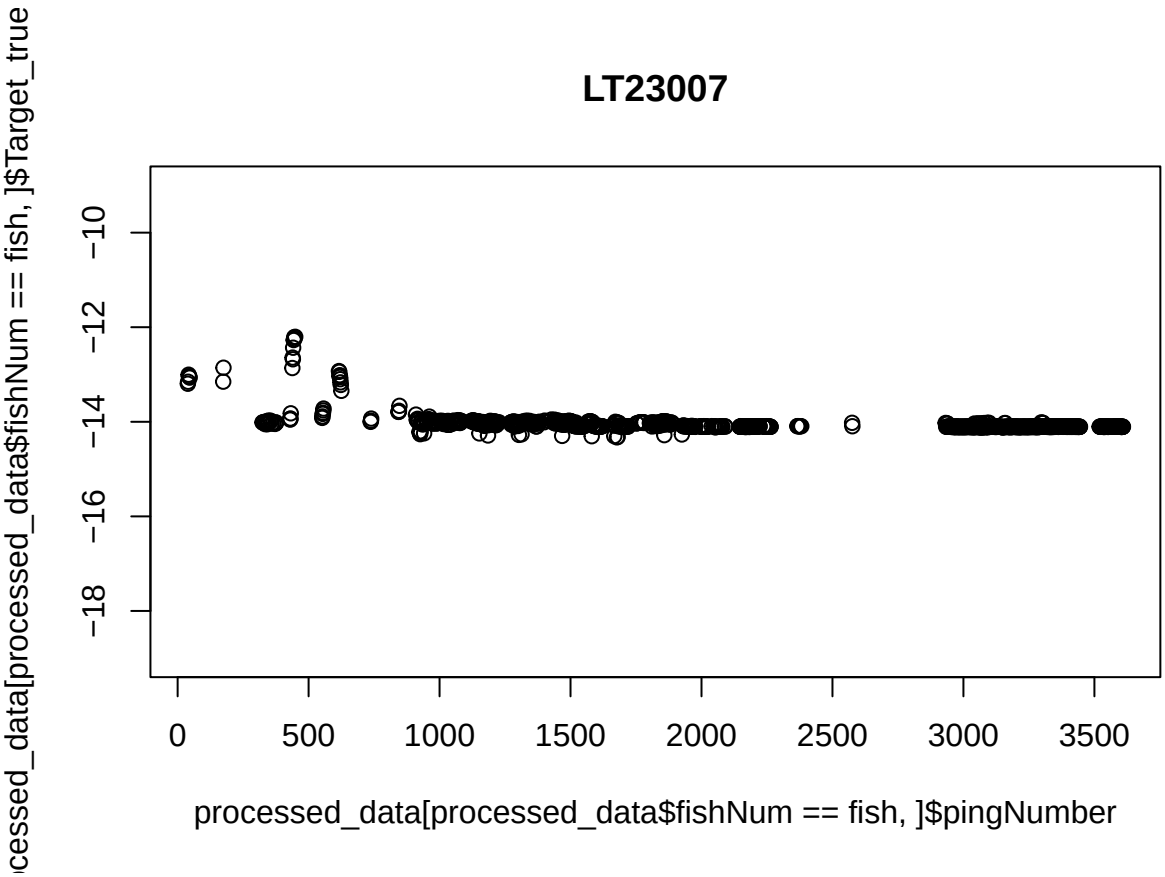

LT021
−10
−12
−14
−16
−18
2000
4000
6000
8000
10000
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

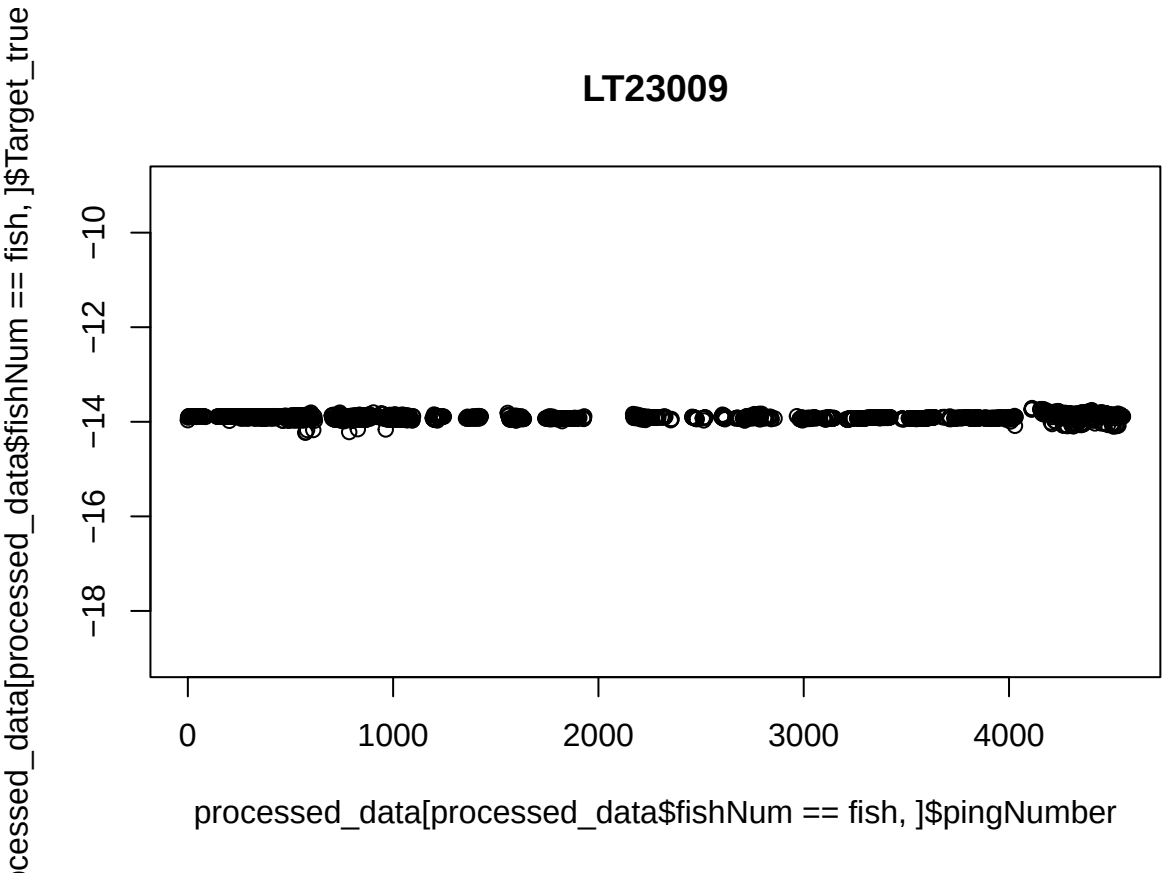

LT23002
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
2000
4000
6000
8000
10000
processed_data[processed_data$fishNum == fish,]$pingNumber

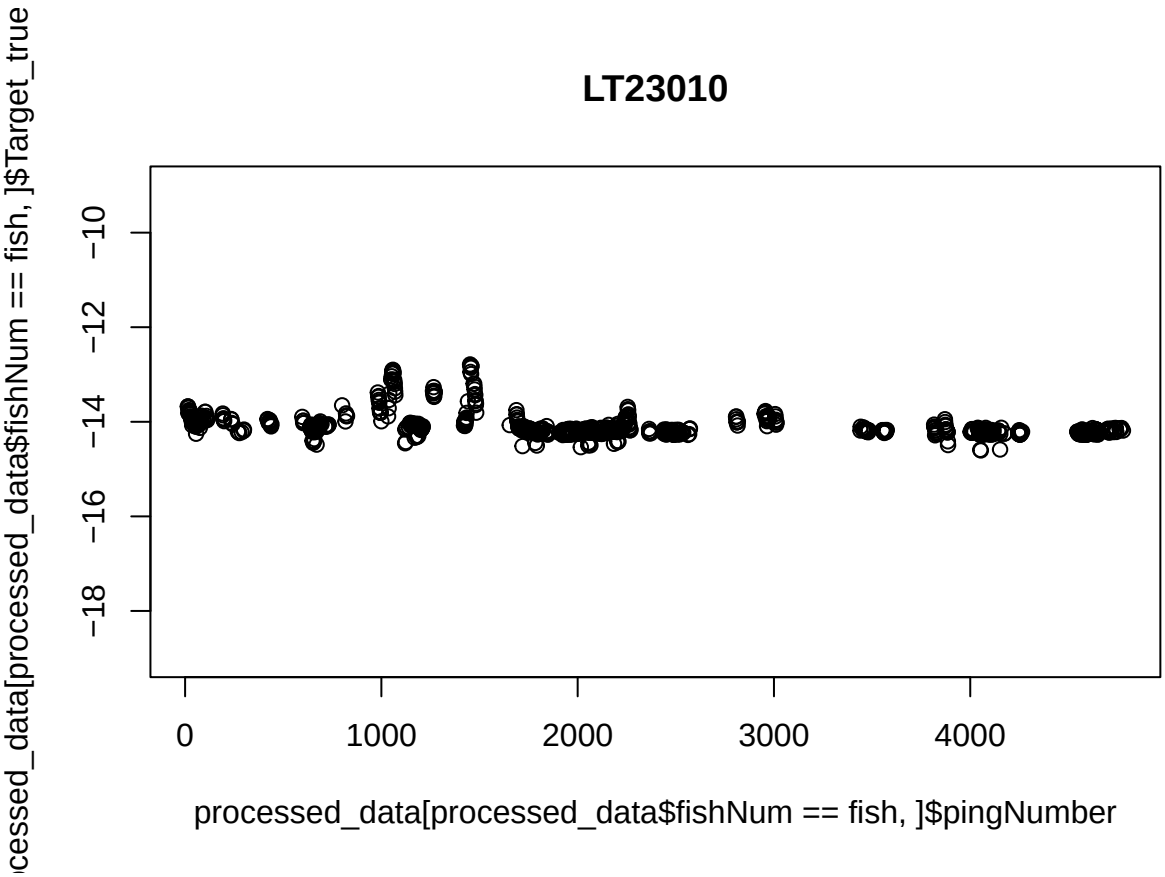

LT23003
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
1000
2000
3000
4000
5000
processed_data[processed_data$fishNum == fish,]$pingNumber

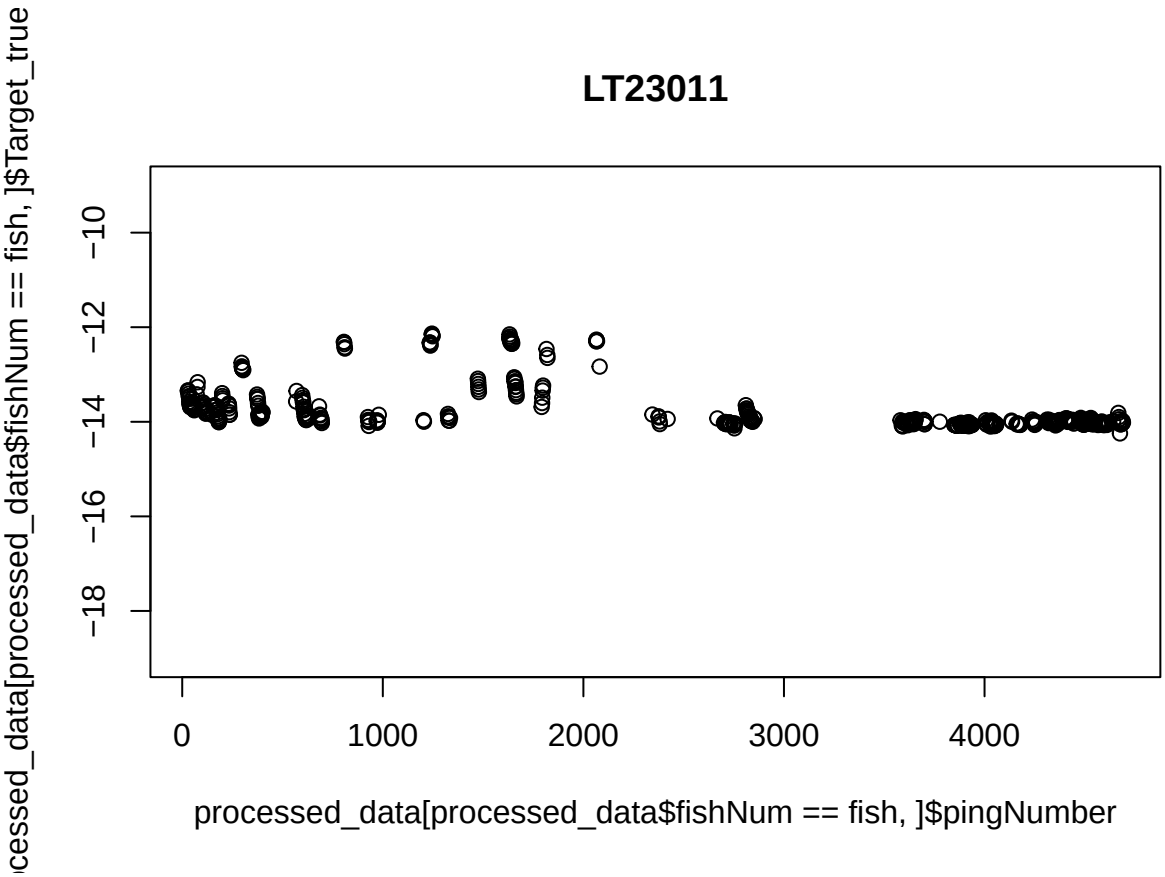

LT23004
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
1000
2000
3000
4000
5000
processed_data[processed_data$fishNum == fish,]$pingNumber

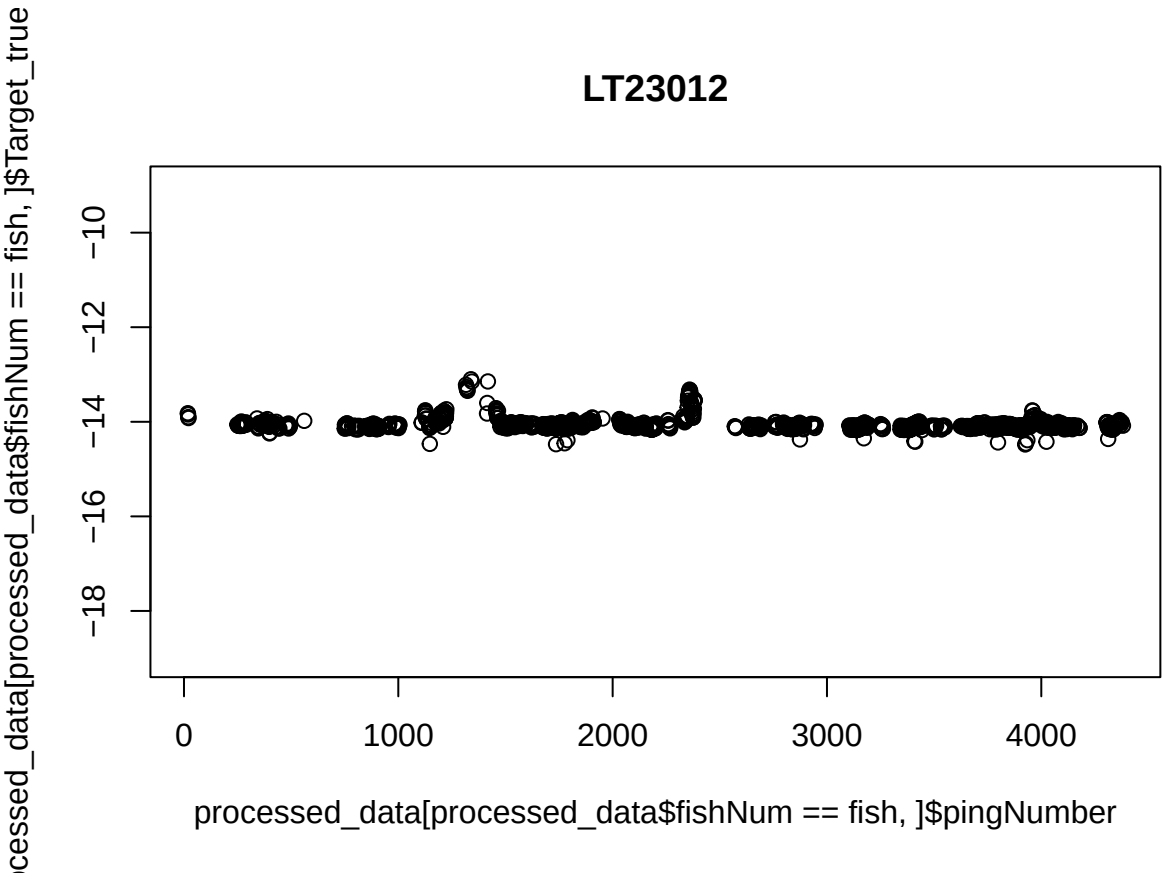

LT23005
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

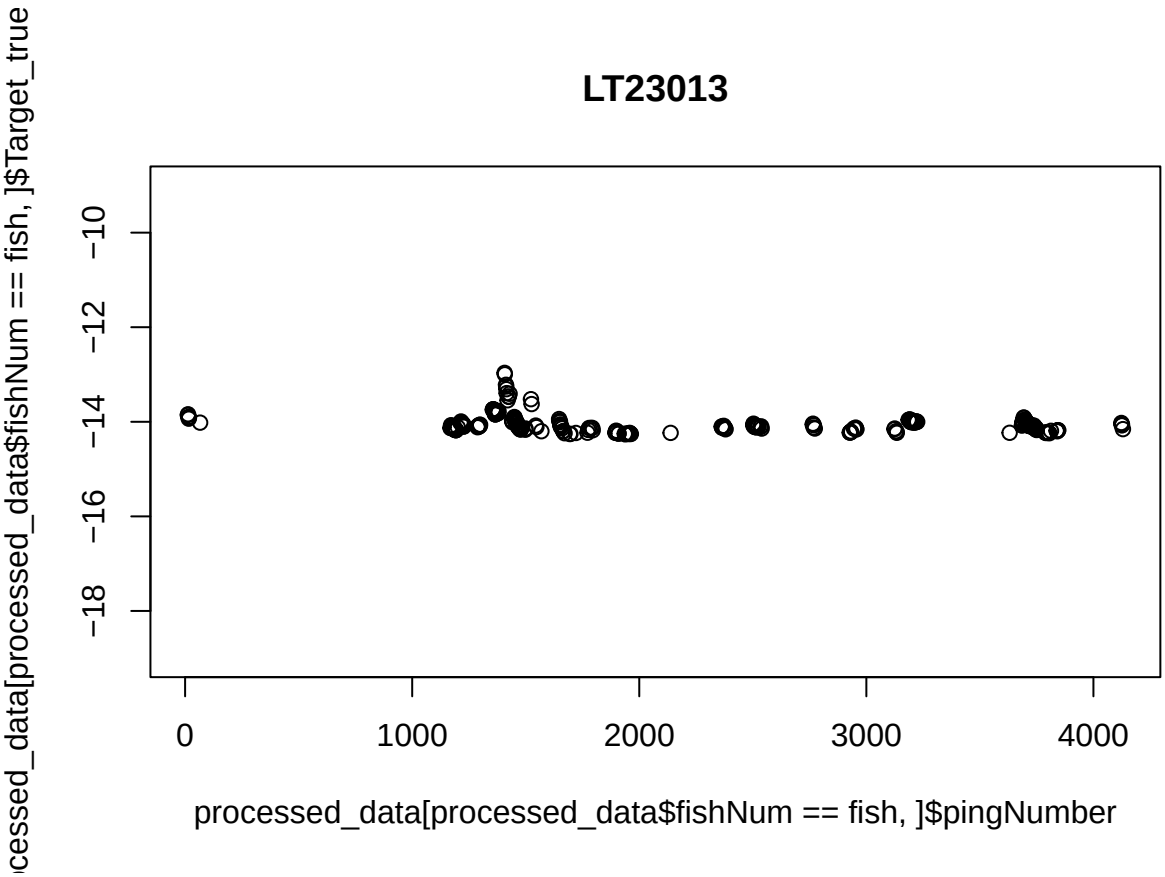

LT23007
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
500
1000
1500
2000
2500
3000
3500
processed_data[processed_data$fishNum == fish,]$pingNumber

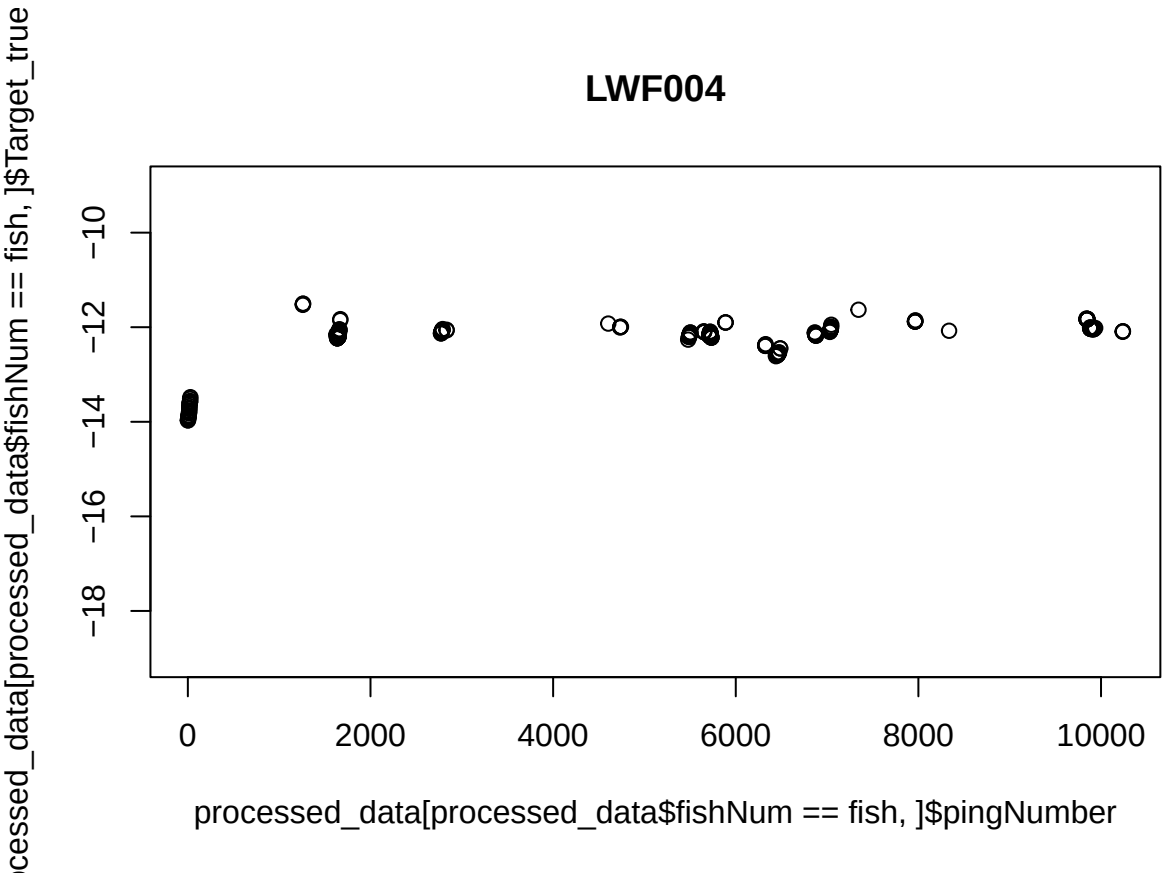

LT23009
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

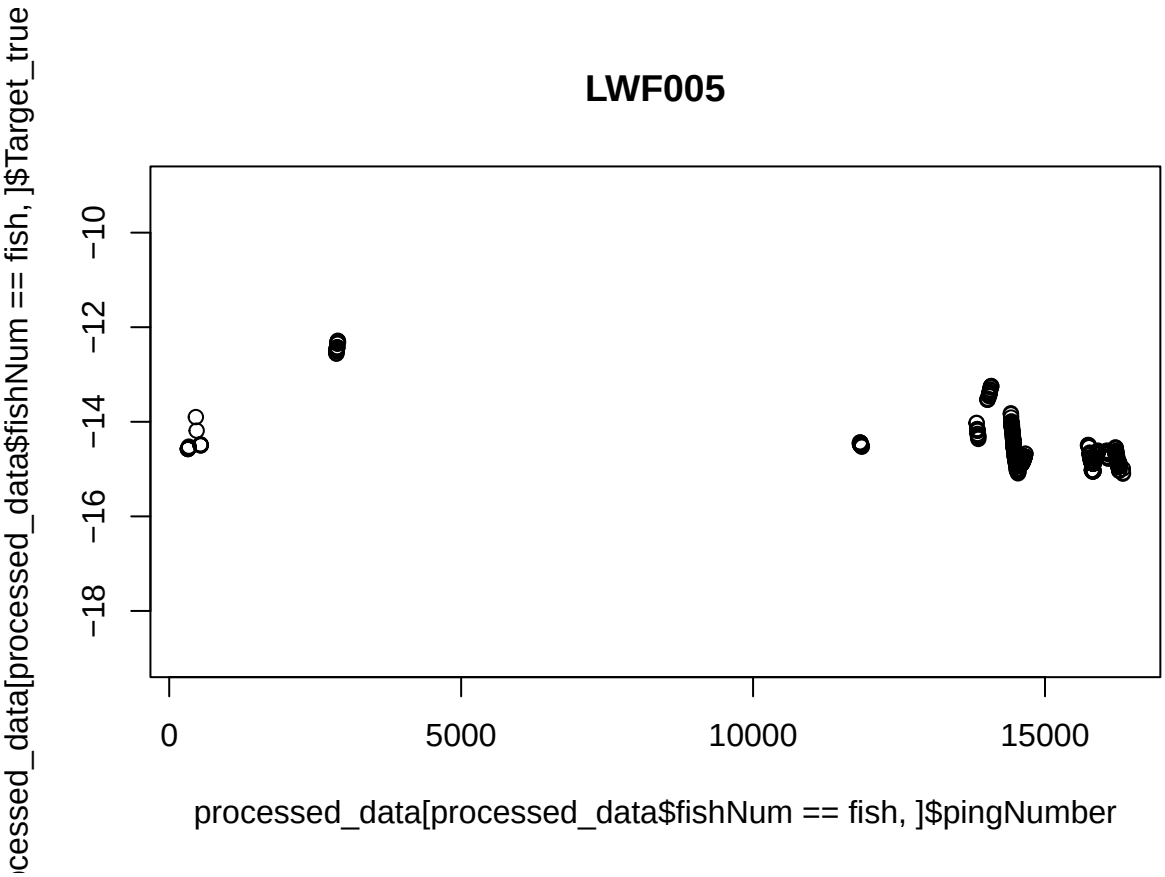

LT23010
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

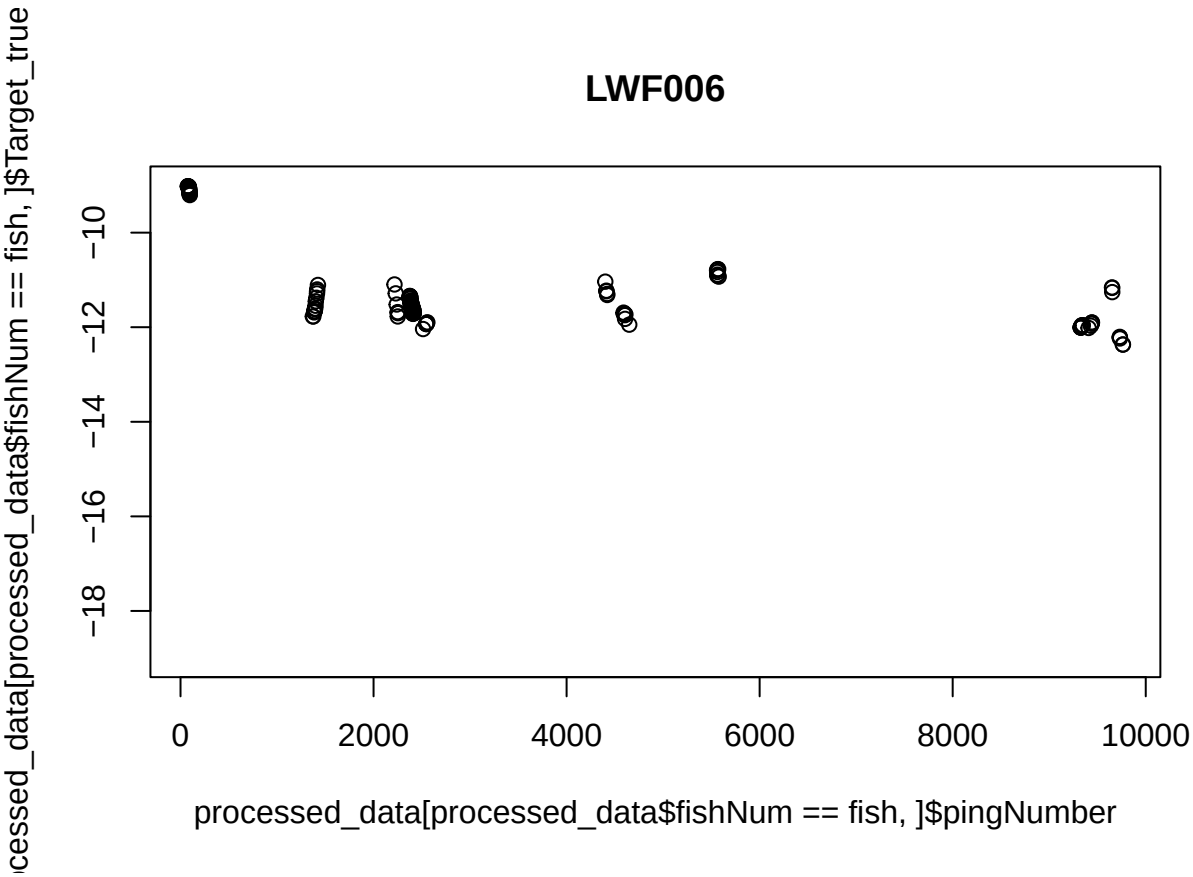

LT23011
−10
−12
−14
−16
−18
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

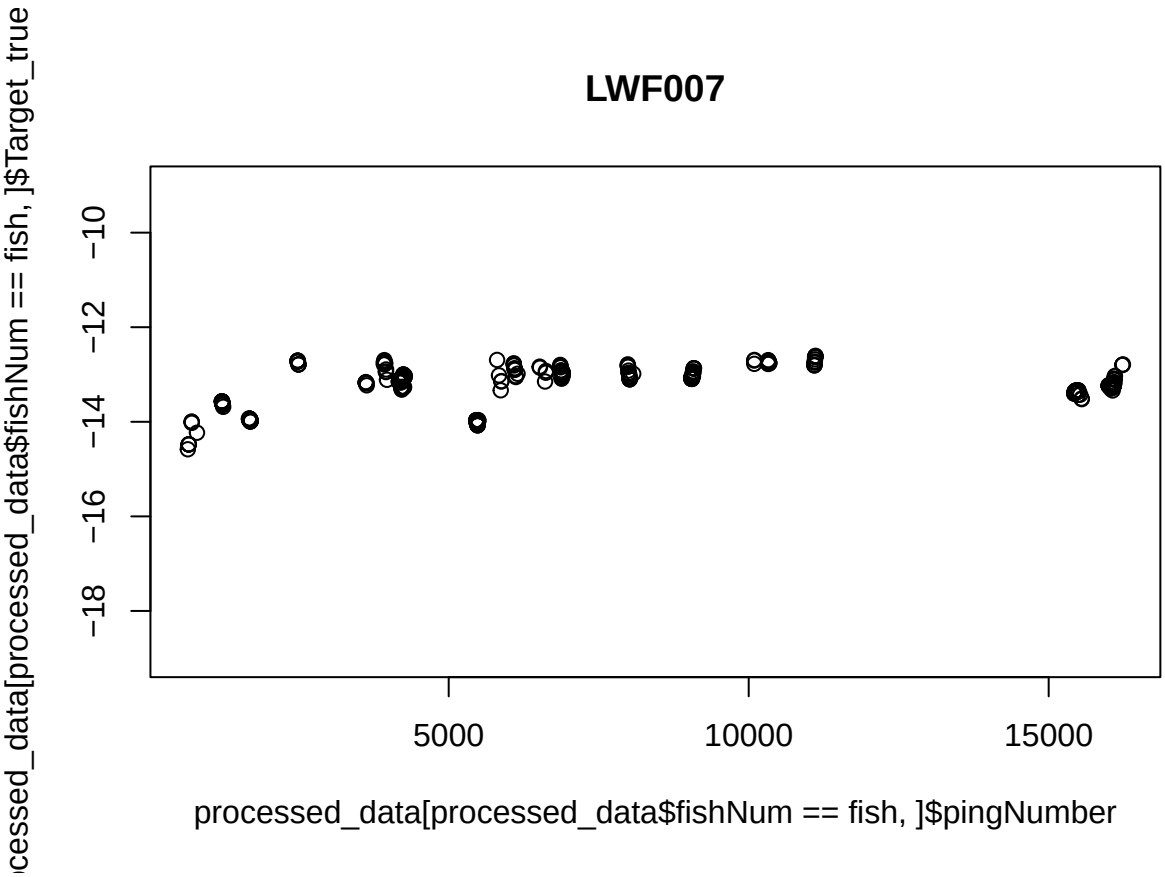

LT23012
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

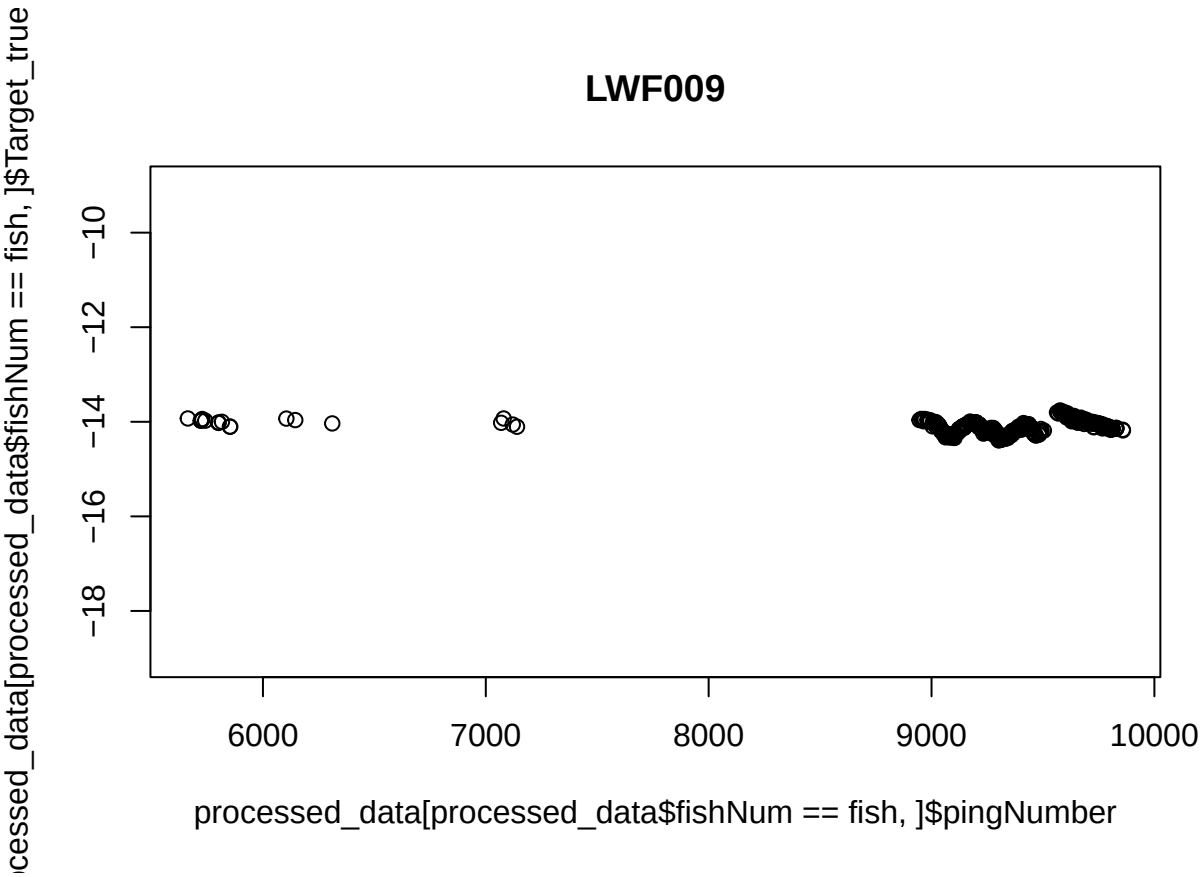

LT23013
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

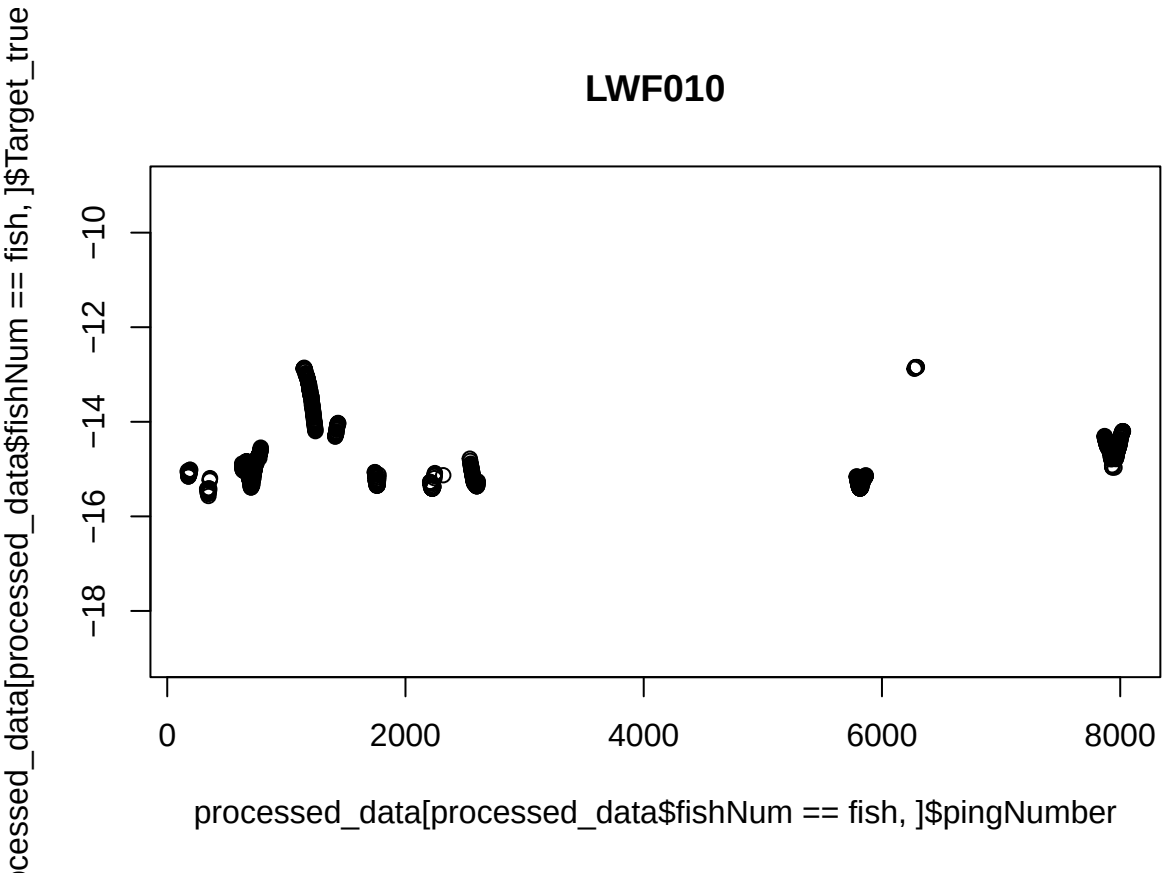

LWF004
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
2000
4000
6000
8000
10000
processed_data[processed_data$fishNum == fish,]$pingNumber

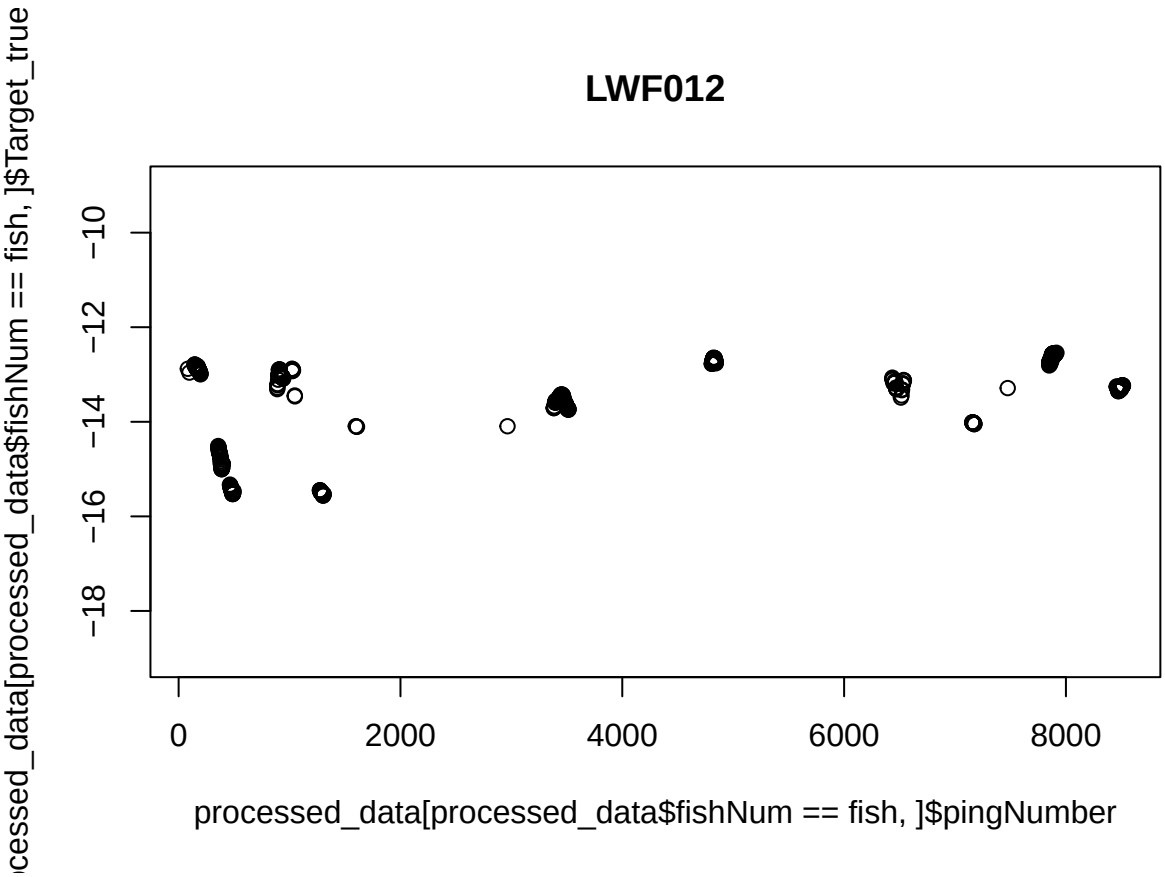

LWF005
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
5000
10000
15000
processed_data[processed_data$fishNum == fish,]$pingNumber

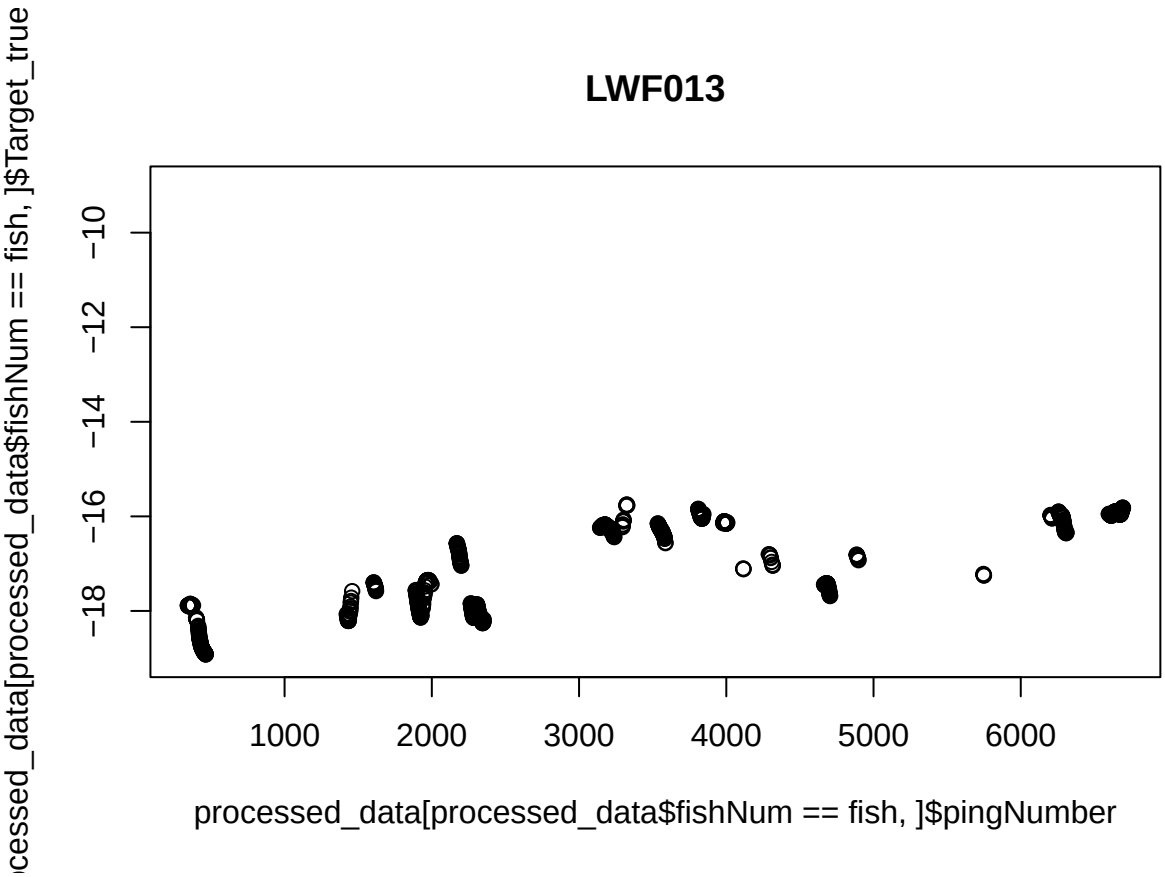

LWF006
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
2000
4000
6000
8000
10000
processed_data[processed_data$fishNum == fish,]$pingNumber

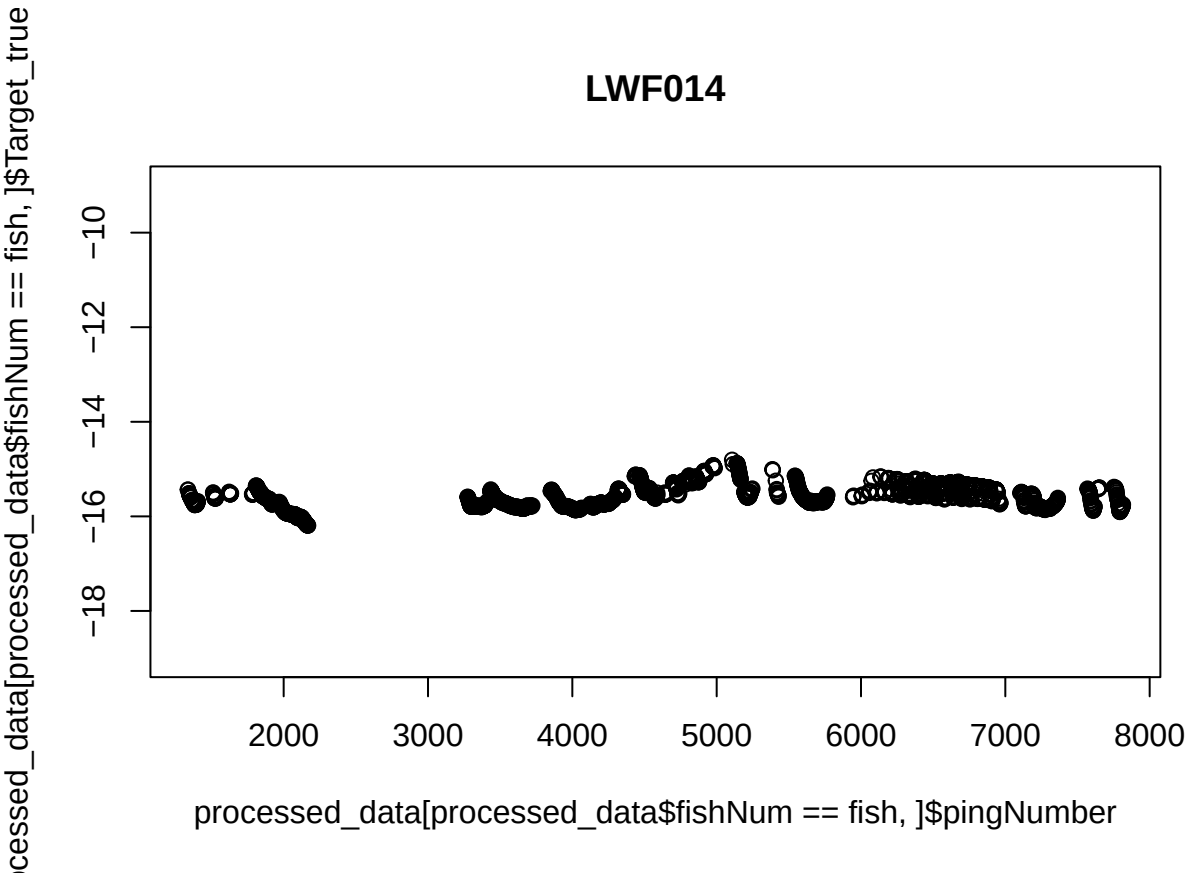

LWF007
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
5000
10000
15000
processed_data[processed_data$fishNum == fish,]$pingNumber

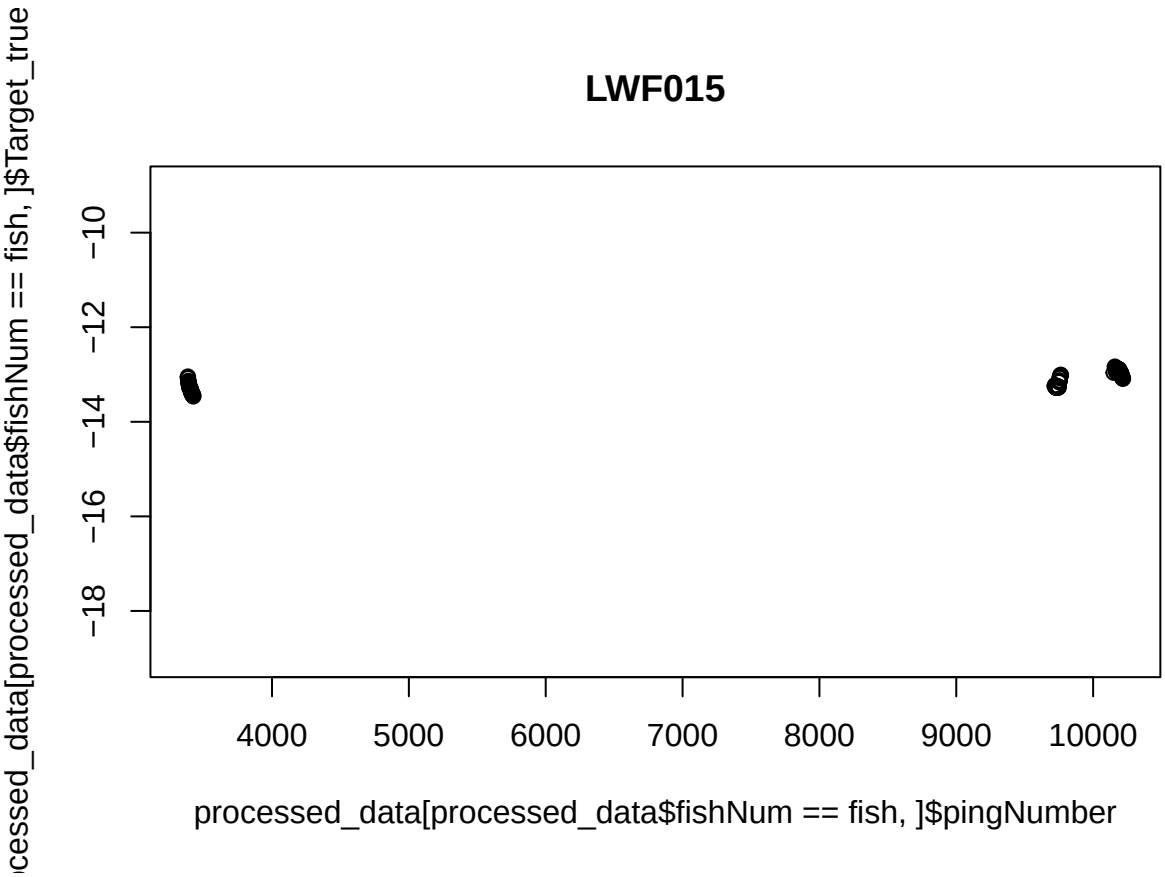

LWF009
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
6000
7000
8000
9000
10000
processed_data[processed_data$fishNum == fish,]$pingNumber

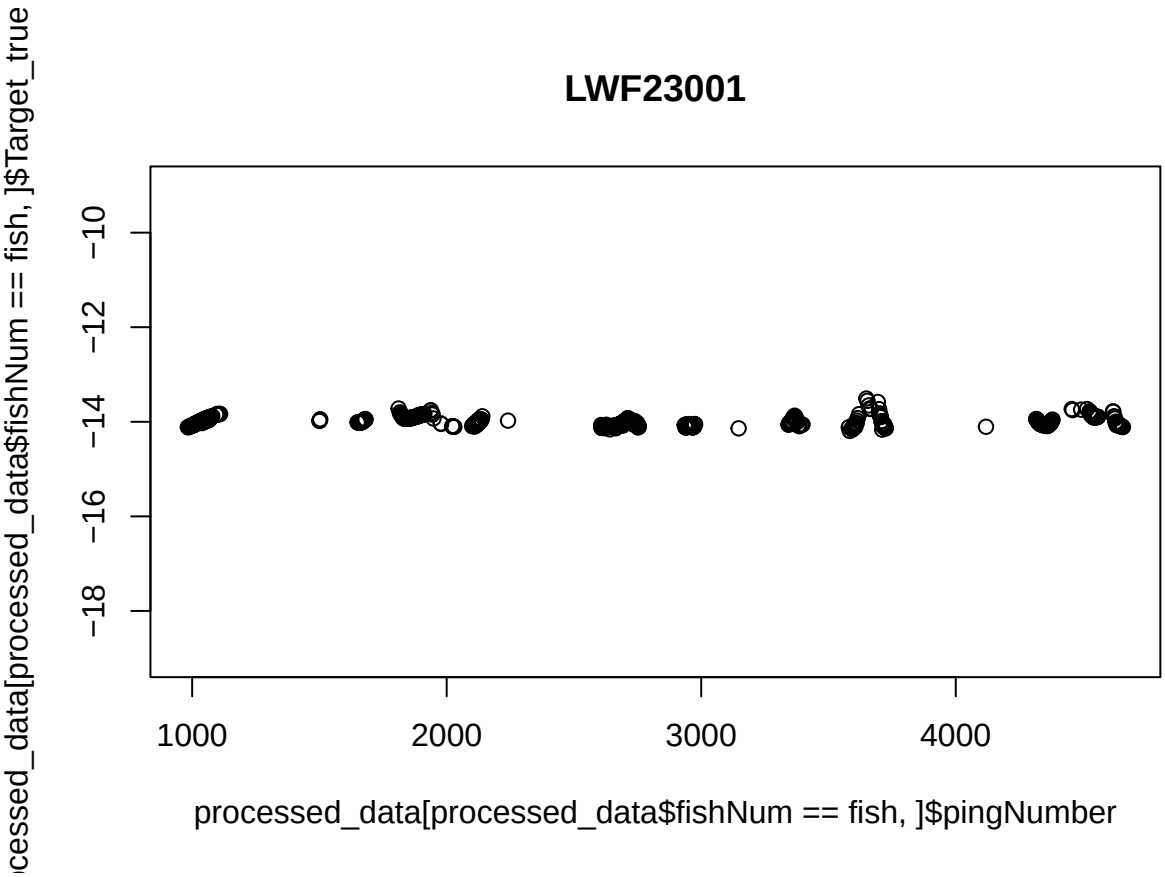

LWF010
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
2000
4000
6000
8000
processed_data[processed_data$fishNum == fish,]$pingNumber

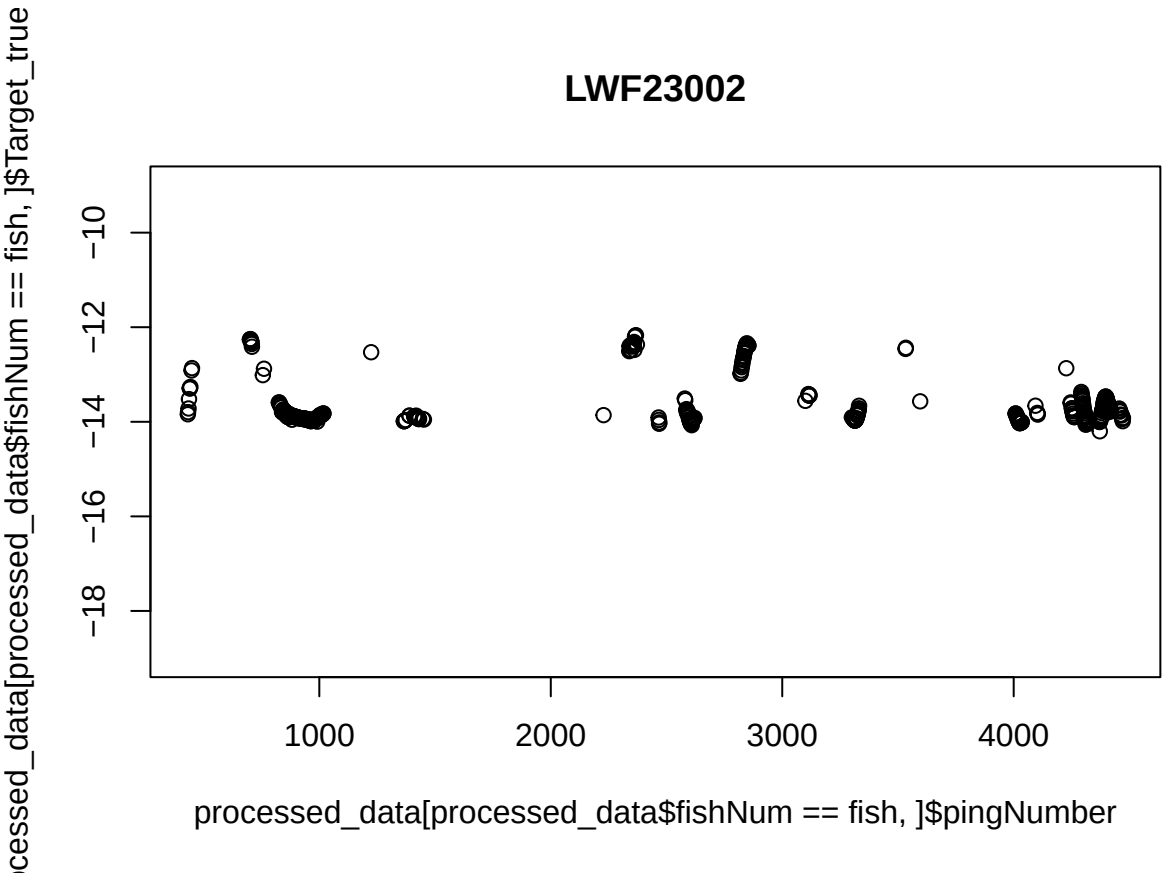

LWF012
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
2000
4000
6000
8000
processed_data[processed_data$fishNum == fish,]$pingNumber

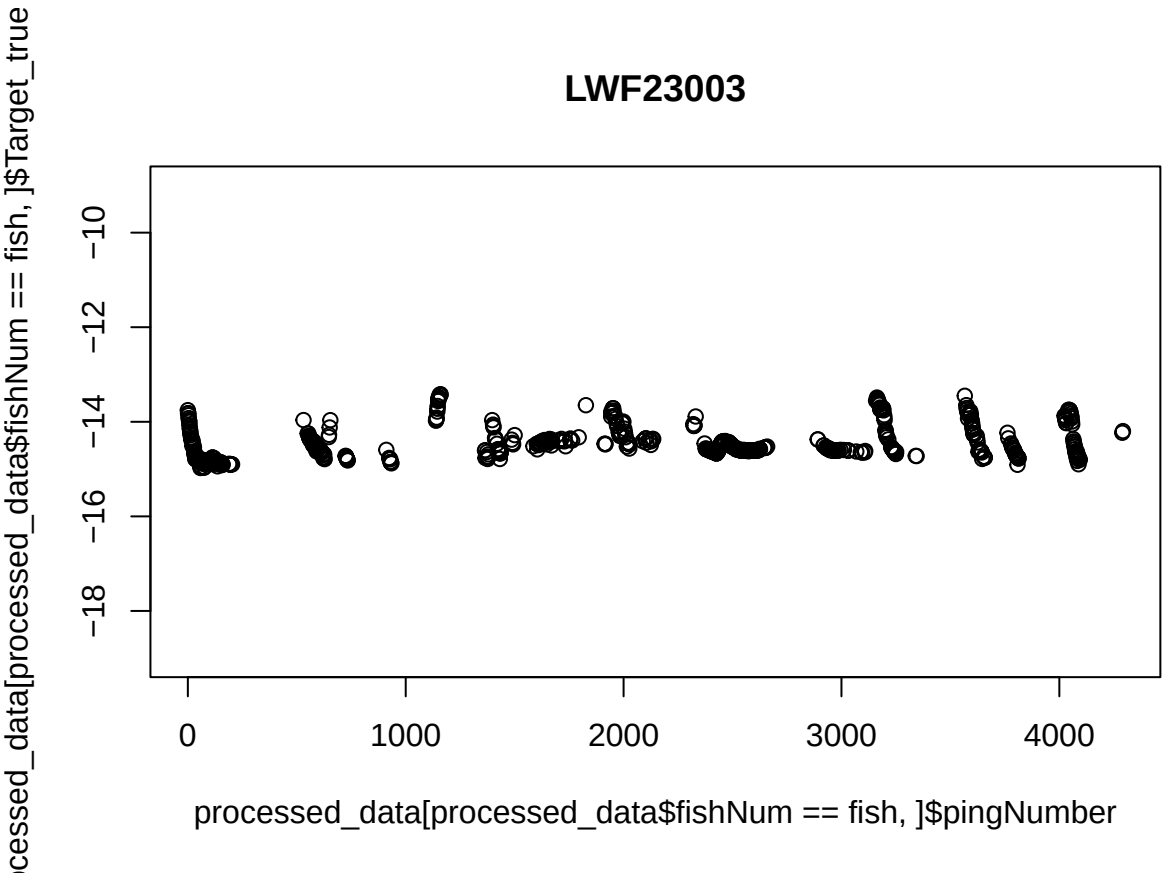

LWF013
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
1000
2000
3000
4000
5000
6000
processed_data[processed_data$fishNum == fish,]$pingNumber

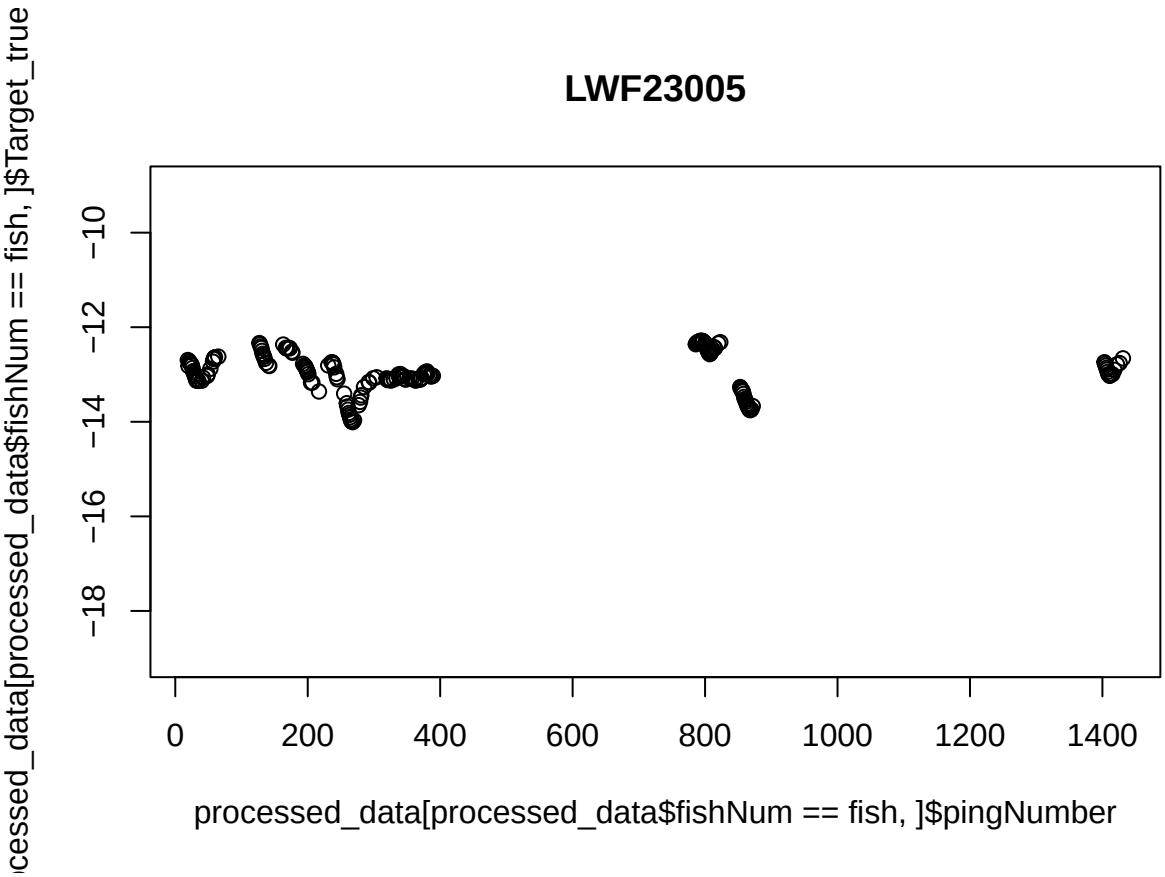

LWF014
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
2000
3000
4000
5000
6000
7000
8000
processed_data[processed_data$fishNum == fish,]$pingNumber

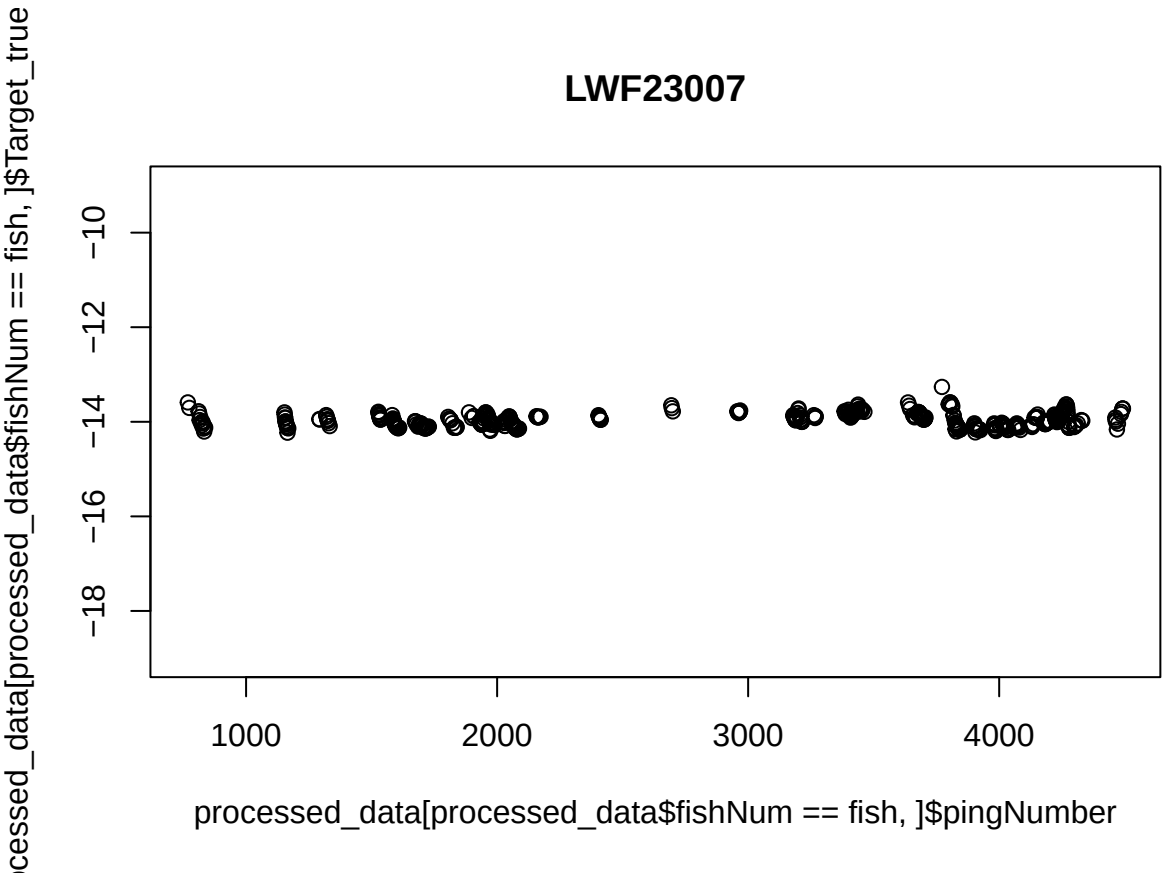

LWF015
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
4000
5000
6000
7000
8000
9000
10000
processed_data[processed_data$fishNum == fish,]$pingNumber

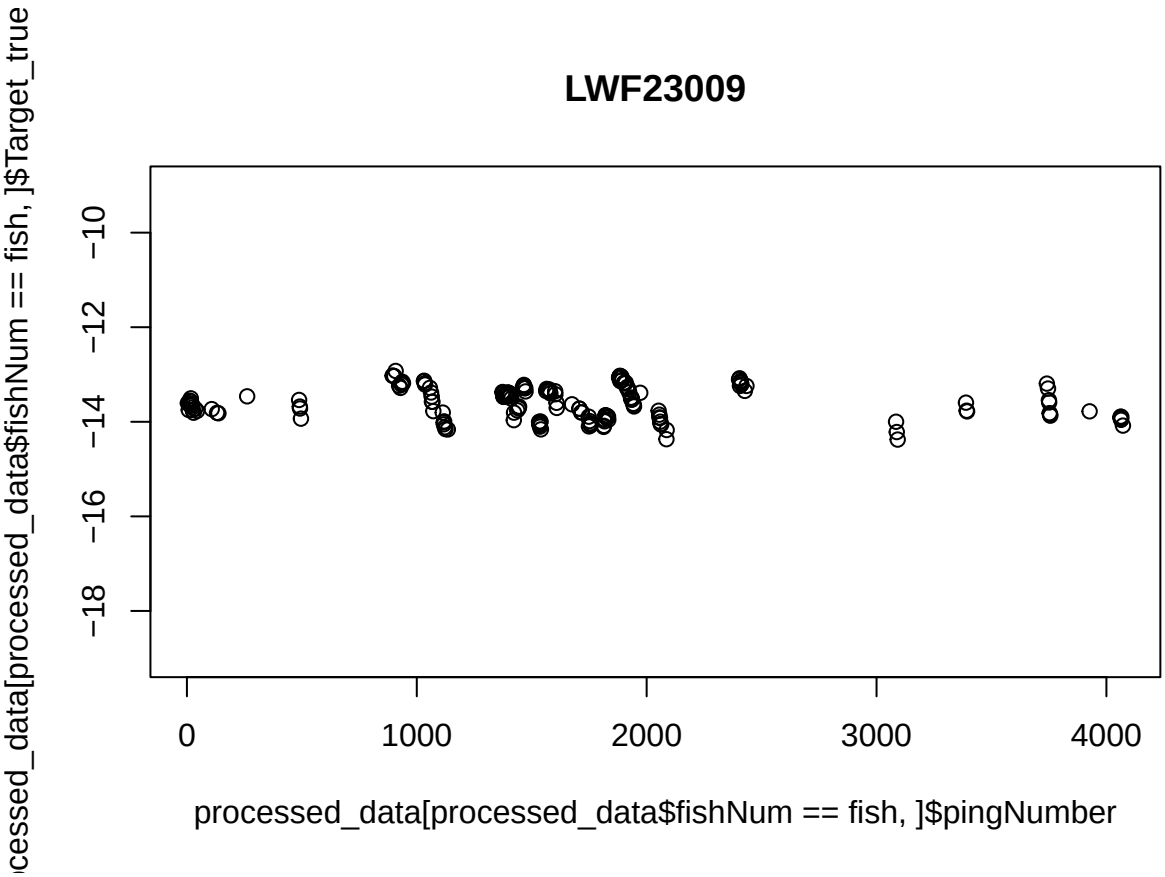

LWF23001
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

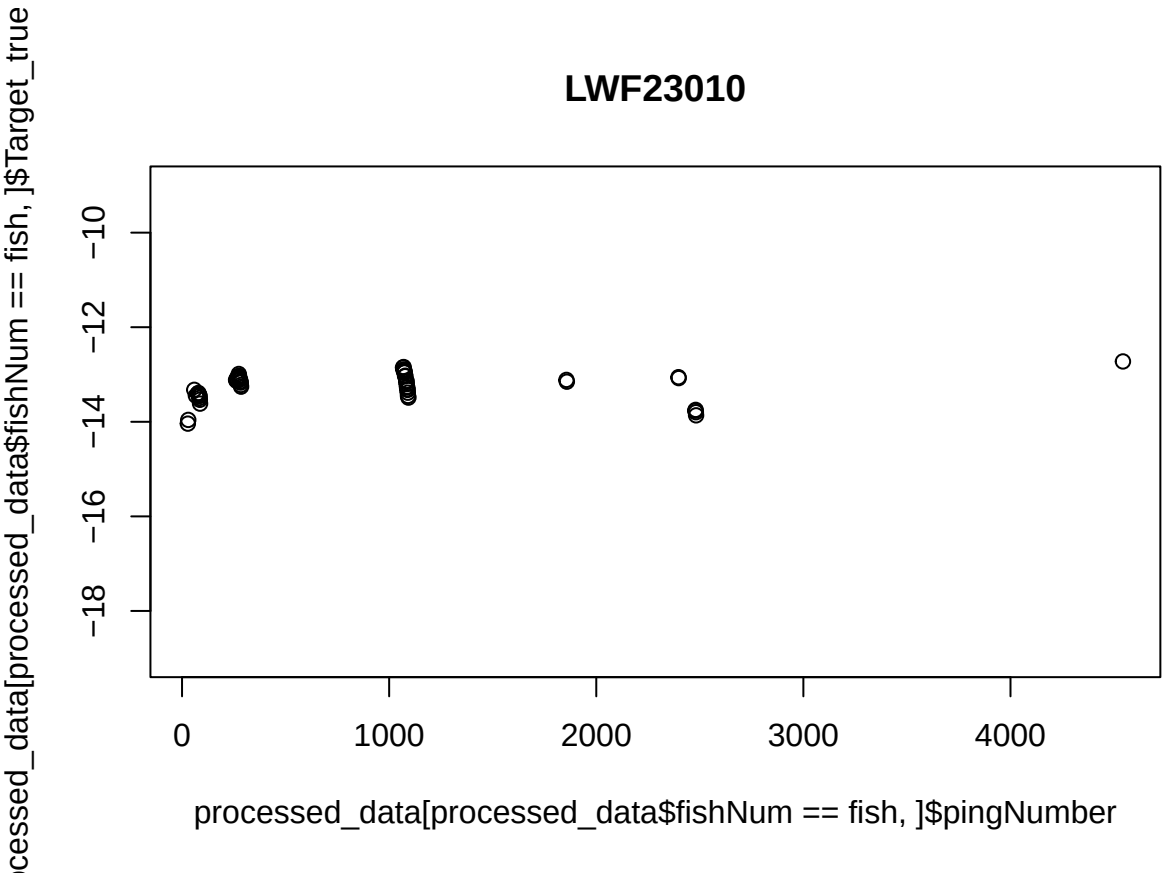

LWF23002
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

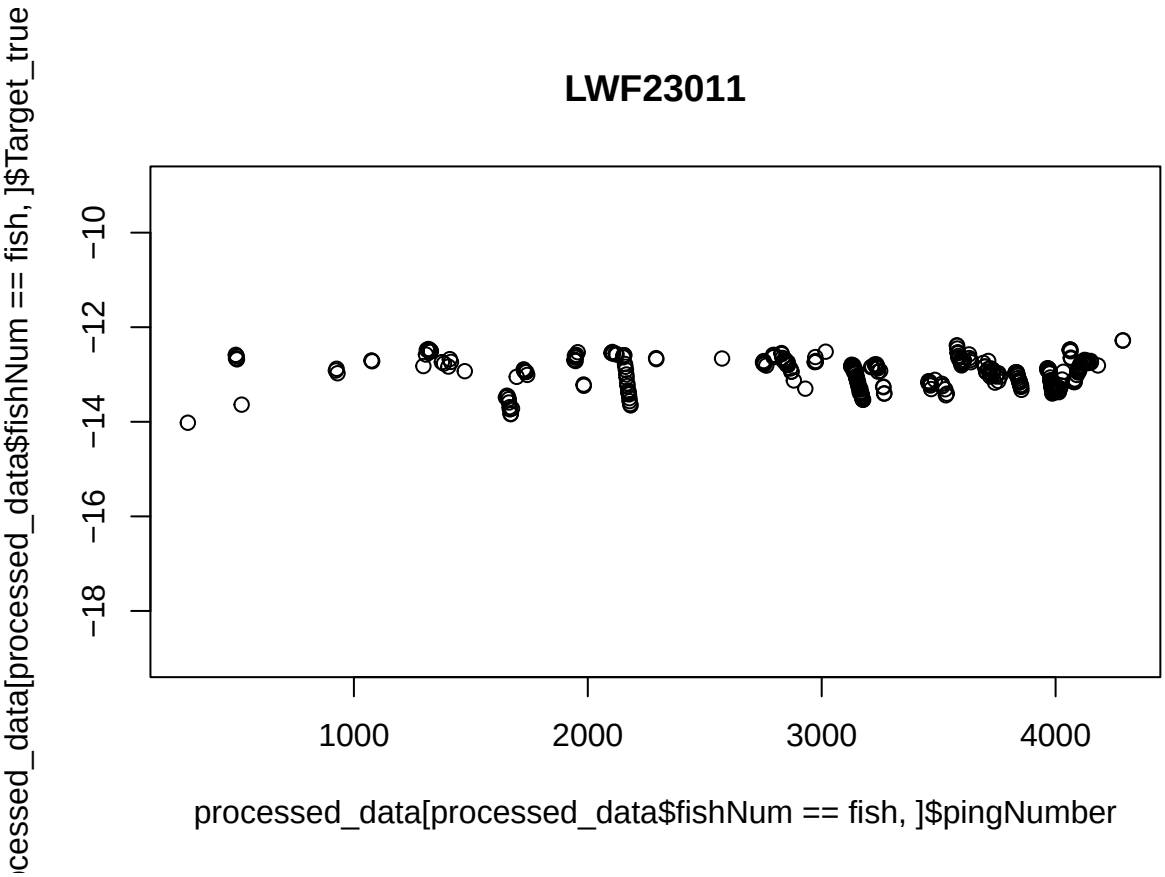

LWF23003
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

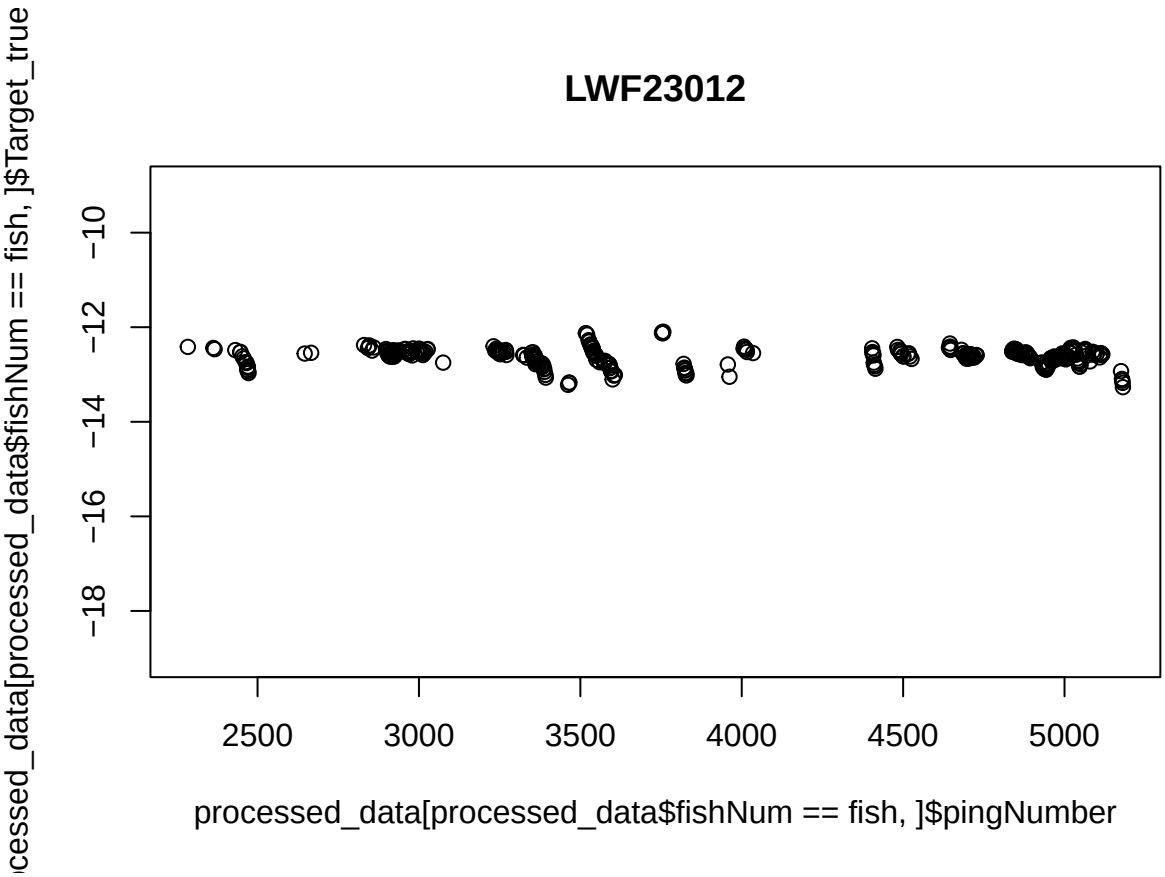

LWF23005
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
200
400
600
800
1000
1200
1400
processed_data[processed_data$fishNum == fish,]$pingNumber

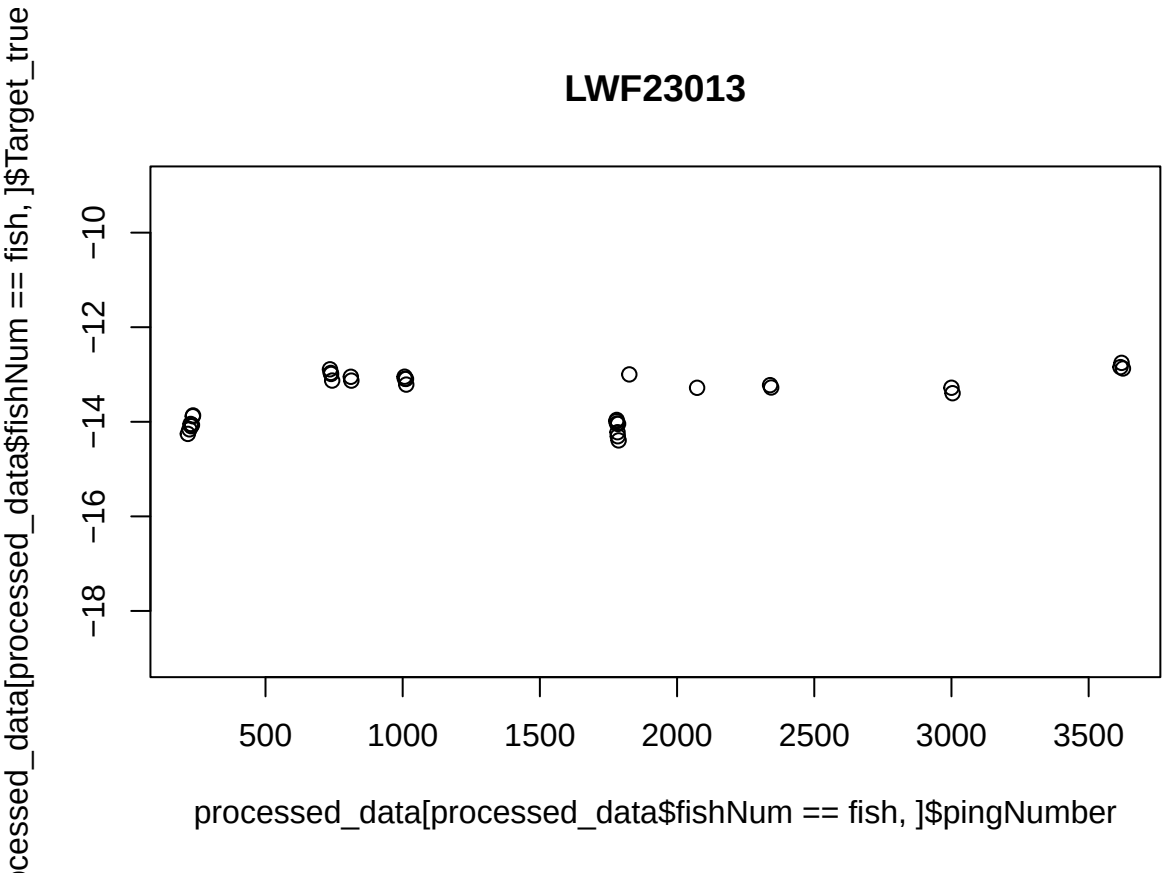

LWF23007
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

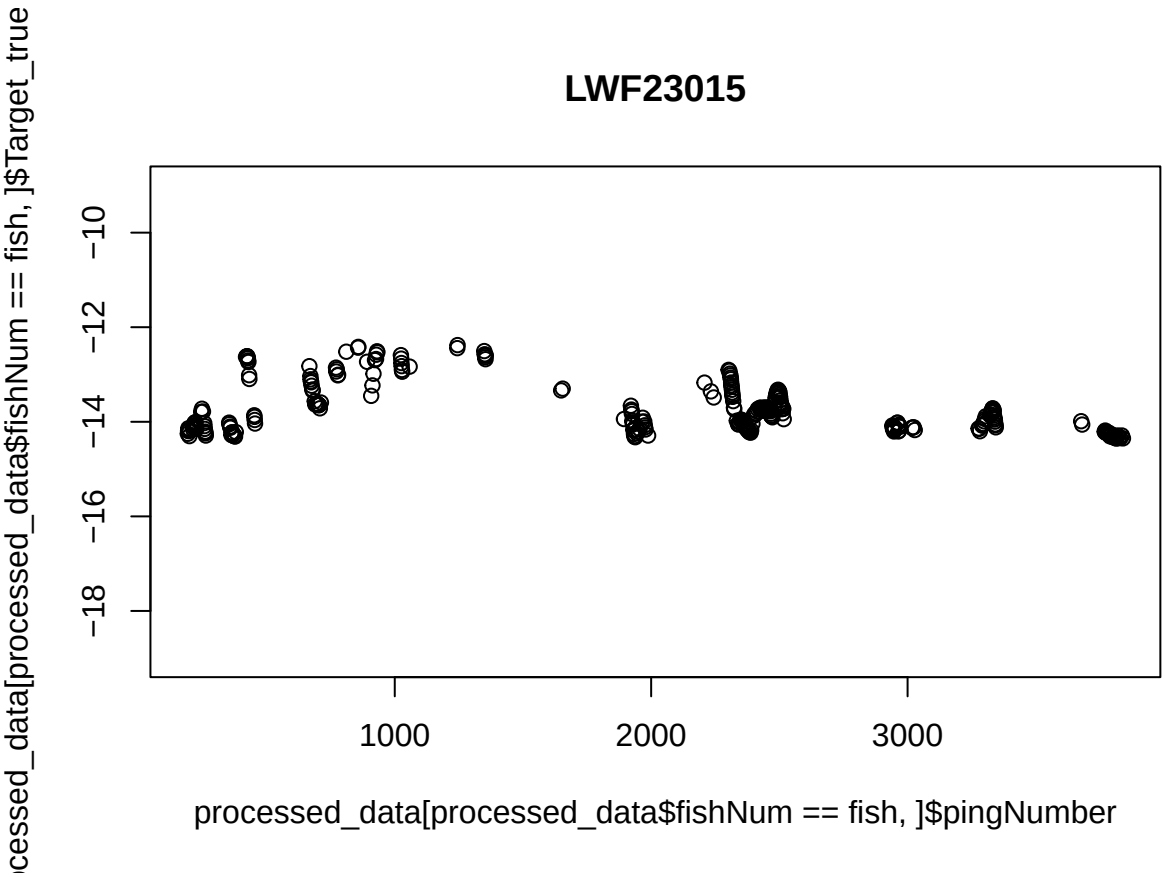

LWF23009
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

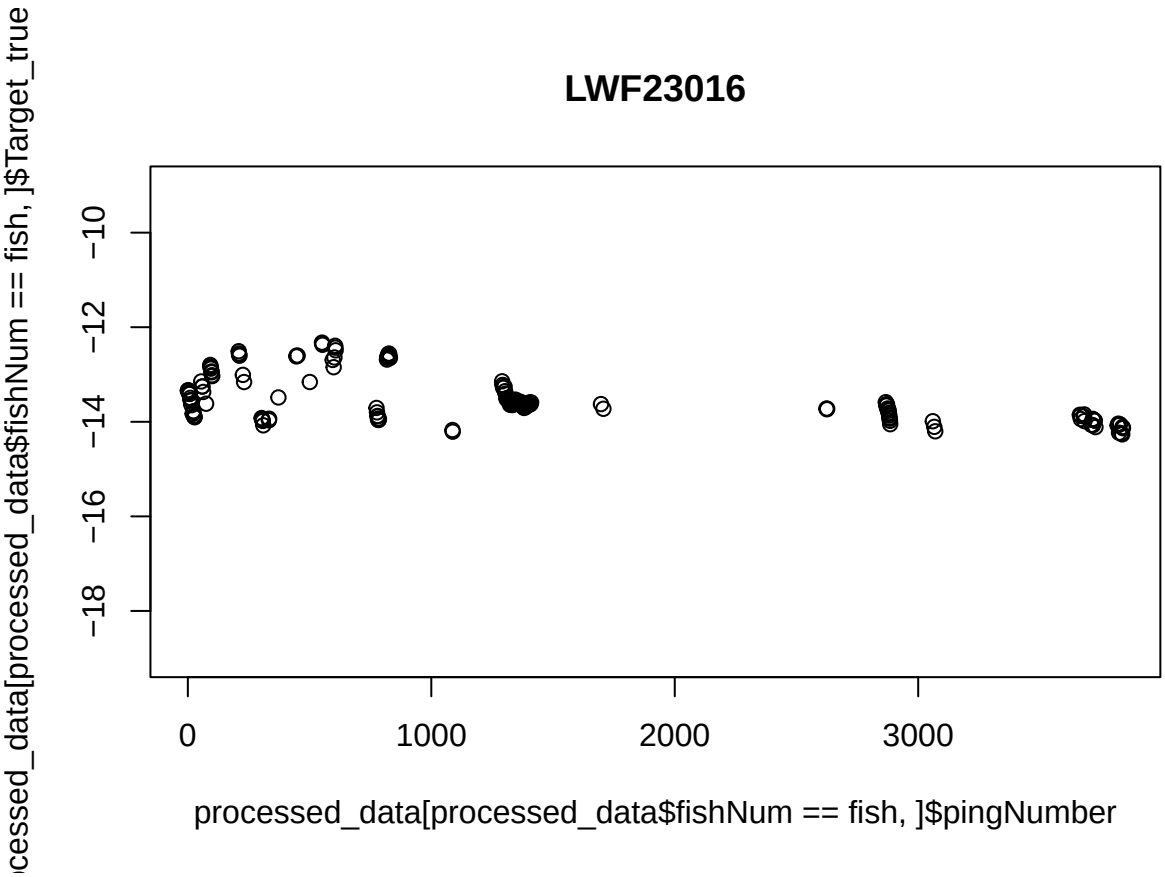

LWF23010
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber

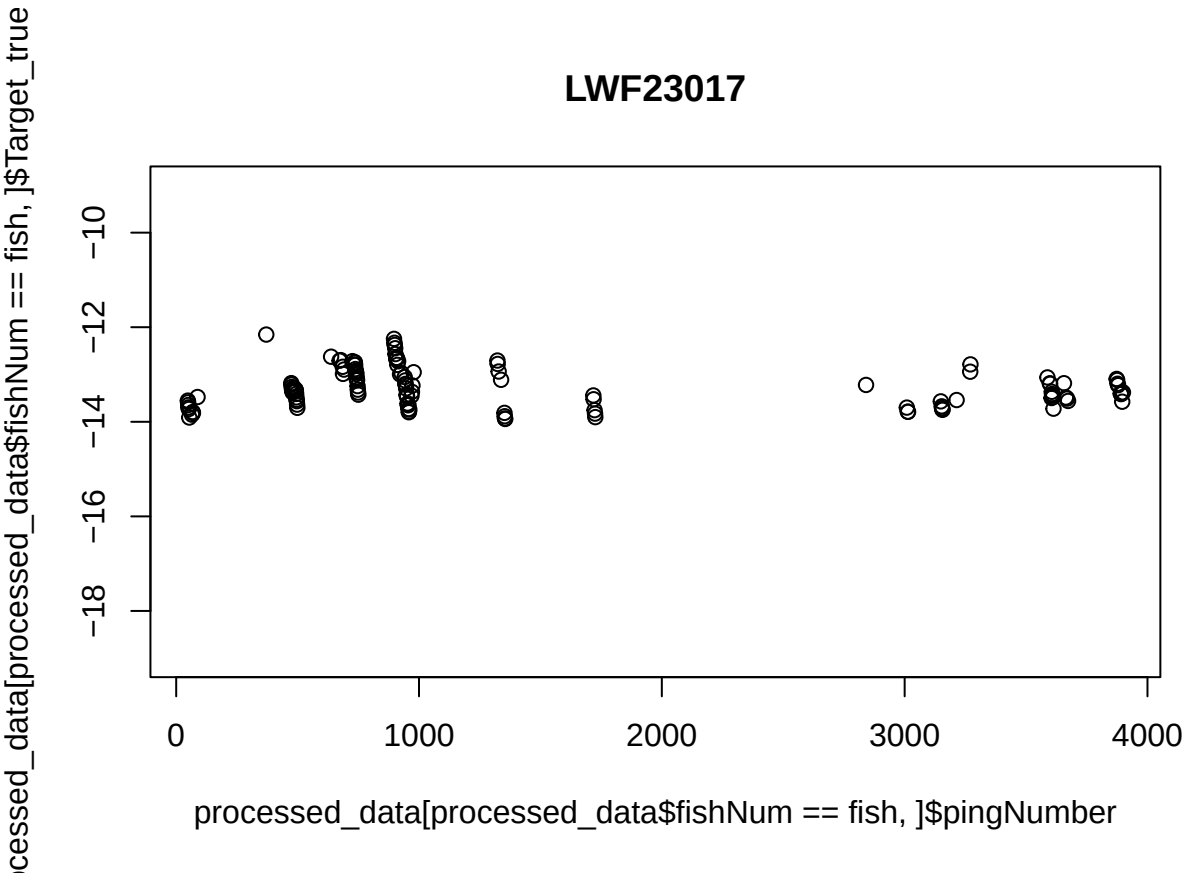

LWF23011
−10
−12
−14
−16
−18
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber
cessed_data[processed_data$fishNum == fish,]$Target_true

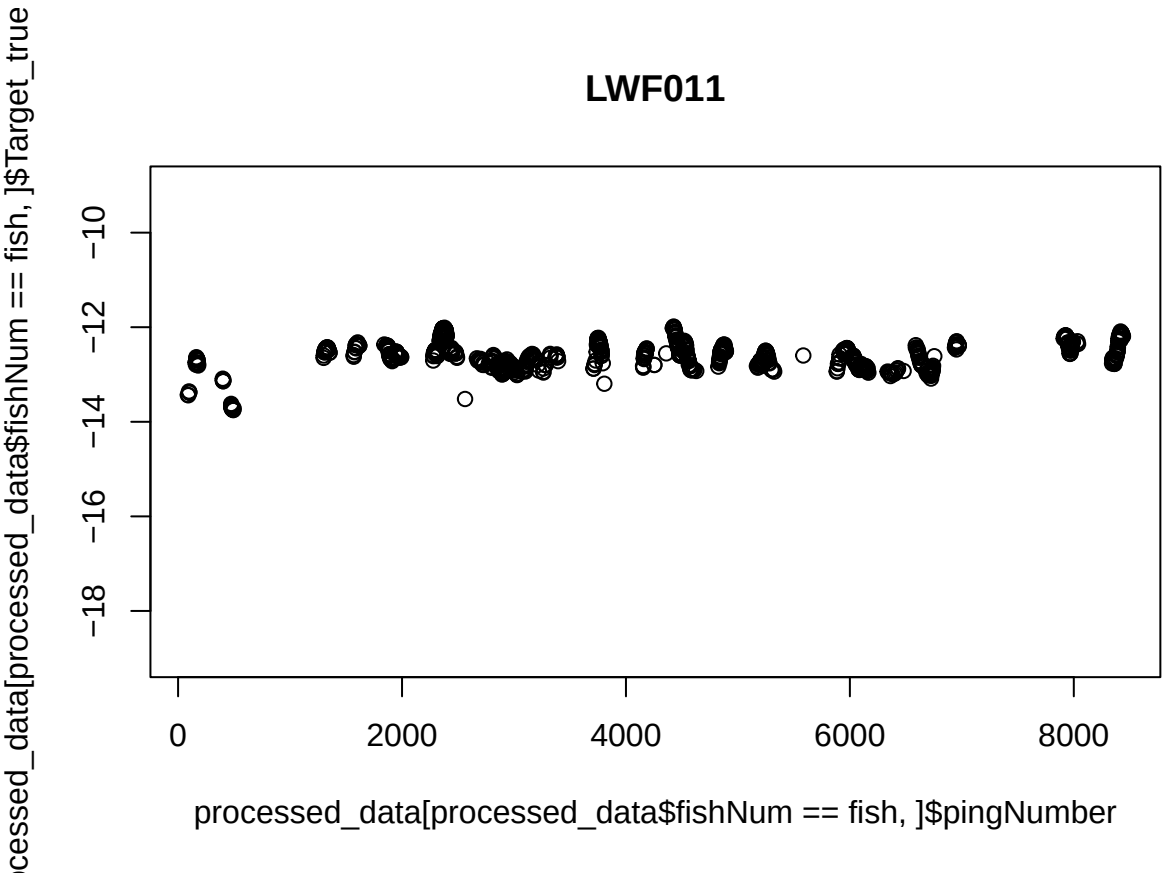

LWF23012
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
2500
3000
3500
4000
4500
5000
processed_data[processed_data$fishNum == fish,]$pingNumber


LWF23013
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
500
1000
1500
2000
2500
3000
3500
processed_data[processed_data$fishNum == fish,]$pingNumber


LWF23015
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
1000
2000
3000
processed_data[processed_data$fishNum == fish,]$pingNumber


LWF23016
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
1000
2000
3000
processed_data[processed_data$fishNum == fish,]$pingNumber


LWF23017
cessed_data[processed_data$fishNum == fish,]$Target_true
−10
−12
−14
−16
−18
0
1000
2000
3000
4000
processed_data[processed_data$fishNum == fish,]$pingNumber




```r
# function to look at one specific fish
specific_fish_ping_lag <- function(fishCode, indicator_n = 200){
  fish_of_interest <- (data.frame(processed_data[processed_data$fishNum == fishCode, ]))
  lst_of_ping <- c()
  for (i in 1:(nrow(fish_of_interest) - 1)){
    diff_t = fish_of_interest[i + 1,]$pingNumber - fish_of_interest[i,]$pingNumber
    if ( diff_t >= indicator_n){
      lst_of_ping <- c(lst_of_ping, i)
    }
  }
  cat("Fish", fishCode, "pings:", lst_of_ping, "\n")
}
```

```r
# generate starting ping numbers of gaps
fishes <- unique(processed_data$fishNum)
for (fish in fishes) {
  specific_fish_ping_lag(fish)
}
```

```
## Fish LT009 pings: 18 51 73 326 356 382 388 407 468 471 479 646
## Fish LT010 pings: 5 57 74 78 80 91 104 112 116
## Fish LT011 pings: 11 21 90 246 330 399 446 449 506
## Fish LT012 pings: 109 154 165 166 221 320 359
## Fish LT014 pings: 45 74 1846 2046
## Fish LT015 pings: 121 170
```

```
## Fish LT016 pings: 10 415 1651 1853 1865
## Fish LT017 pings: 195 440 442 621 623 781 794 797
## Fish LT018 pings: 4 10
## Fish LT021 pings: 45 193 246 259 262
## Fish LT23002 pings: 62 1318 1481 1640 1667 1679
## Fish LT23003 pings: 74 80 99 298
## Fish LT23004 pings:
## Fish LT23005 pings: 111
## Fish LT23007 pings: 627
## Fish LT23009 pings: 917
## Fish LT23010 pings: 772 808 846 960
## Fish LT23011 pings: 155 214 219 225 278
## Fish LT23012 pings: 4
## Fish LT23013 pings: 6 165 192 232 302
## Fish LWF004 pings: 24 28 62 77 82 125 150 172 173 179 180 210
## Fish LWF005 pings: 14 33 48 78 265
## Fish LWF006 pings: 16 31 81 95 102 117
## Fish LWF007 pings: 9 27 57 68 75 160 182 187 198 203 231 249 277 280 291 303 333
## Fish LWF009 pings: 11 14 18
## Fish LWF010 pings: 35 181 287 315 346 408 474 480
## Fish LWF012 pings: 122 181 211 214 215 330 365 392 412 413 461
## Fish LWF013 pings: 81 121 303 396 443 513 559 564 627
## Fish LWF014 pings: 383 2251
## Fish LWF015 pings: 38 78
## Fish LWF23001 pings: 88 256 478
## Fish LWF23002 pings: 9 199 221 304 335 338
## Fish LWF23003 pings: 108 178 194 480 575 646
## Fish LWF23005 pings: 123 168
## Fish LWF23007 pings: 14 172 179 182 191
## Fish LWF23009 pings: 20 24 51 173 182 185 188
## Fish LWF23010 pings: 29 48 50 56
## Fish LWF23011 pings: 1 7 13 46 82
## Fish LWF23012 pings: 175
## Fish LWF23013 pings: 7 17 25 26 28 30
## Fish LWF23015 pings: 57 109 111 136 259 279 308
## Fish LWF23016 pings: 78 80 165 167 170 190
## Fish LWF23017 pings: 10 85 93 98 110 124
## Fish LWF011 pings: 23 47 76 94 156 385 432 591 651 652 813 858
```