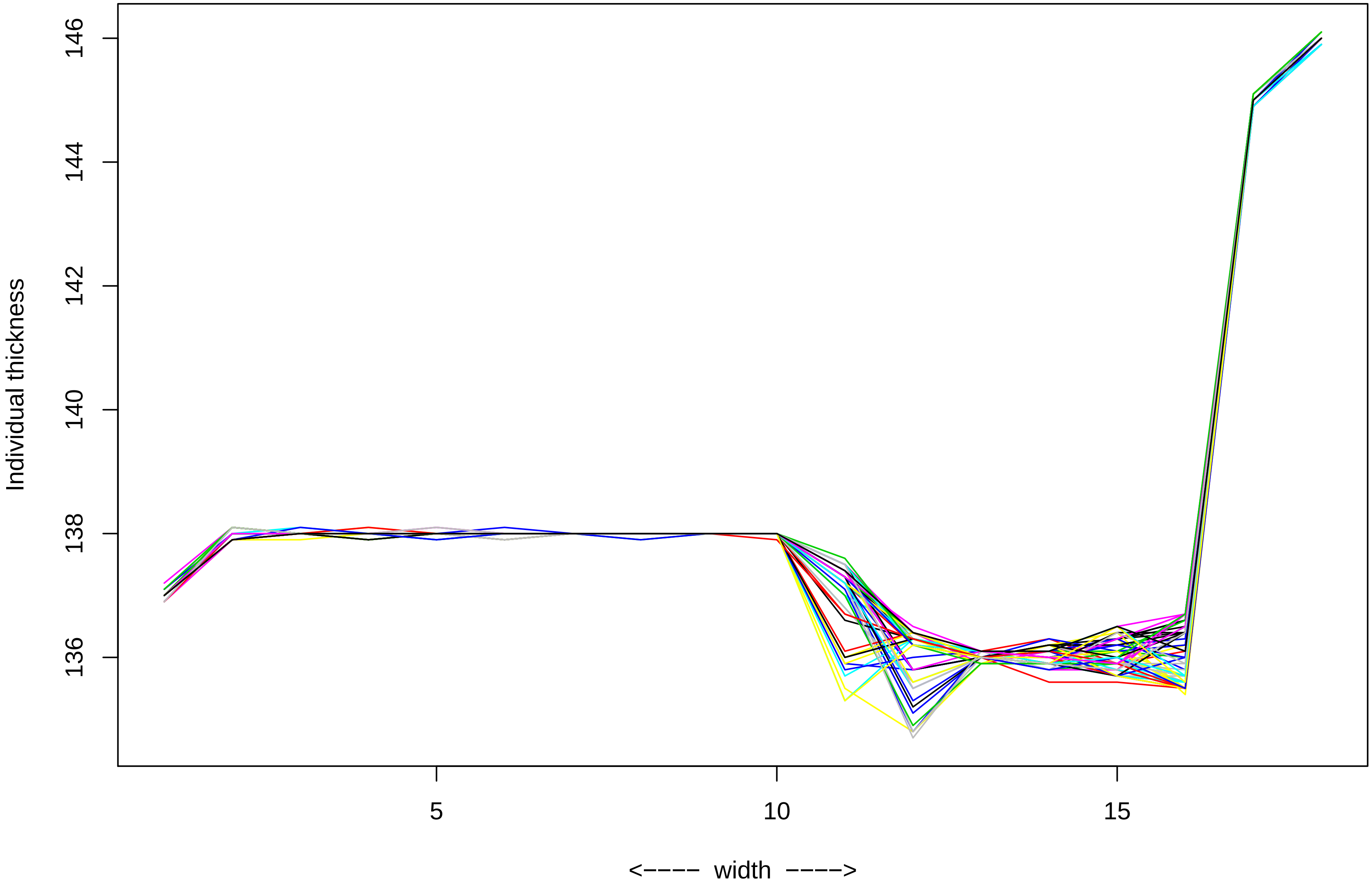
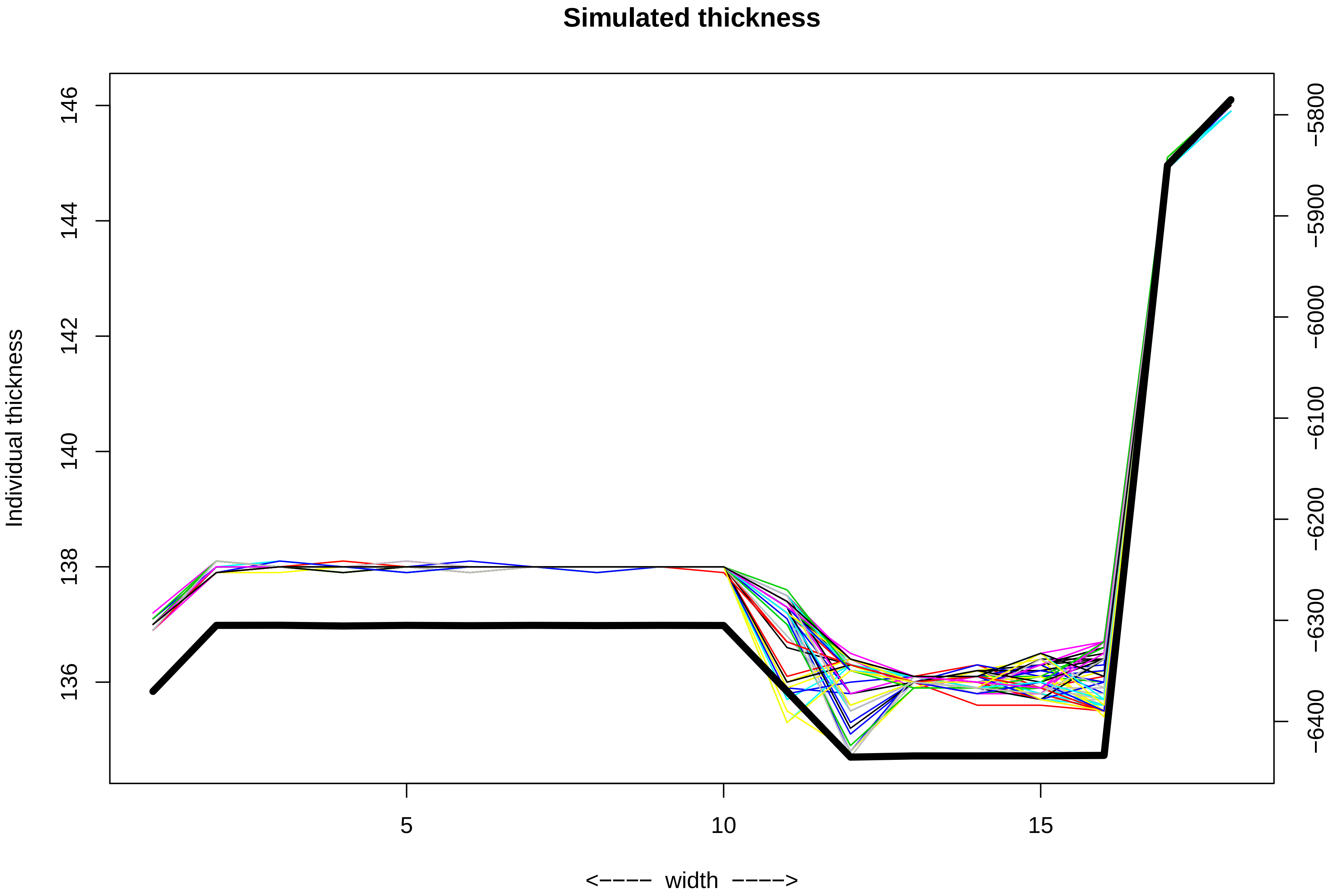
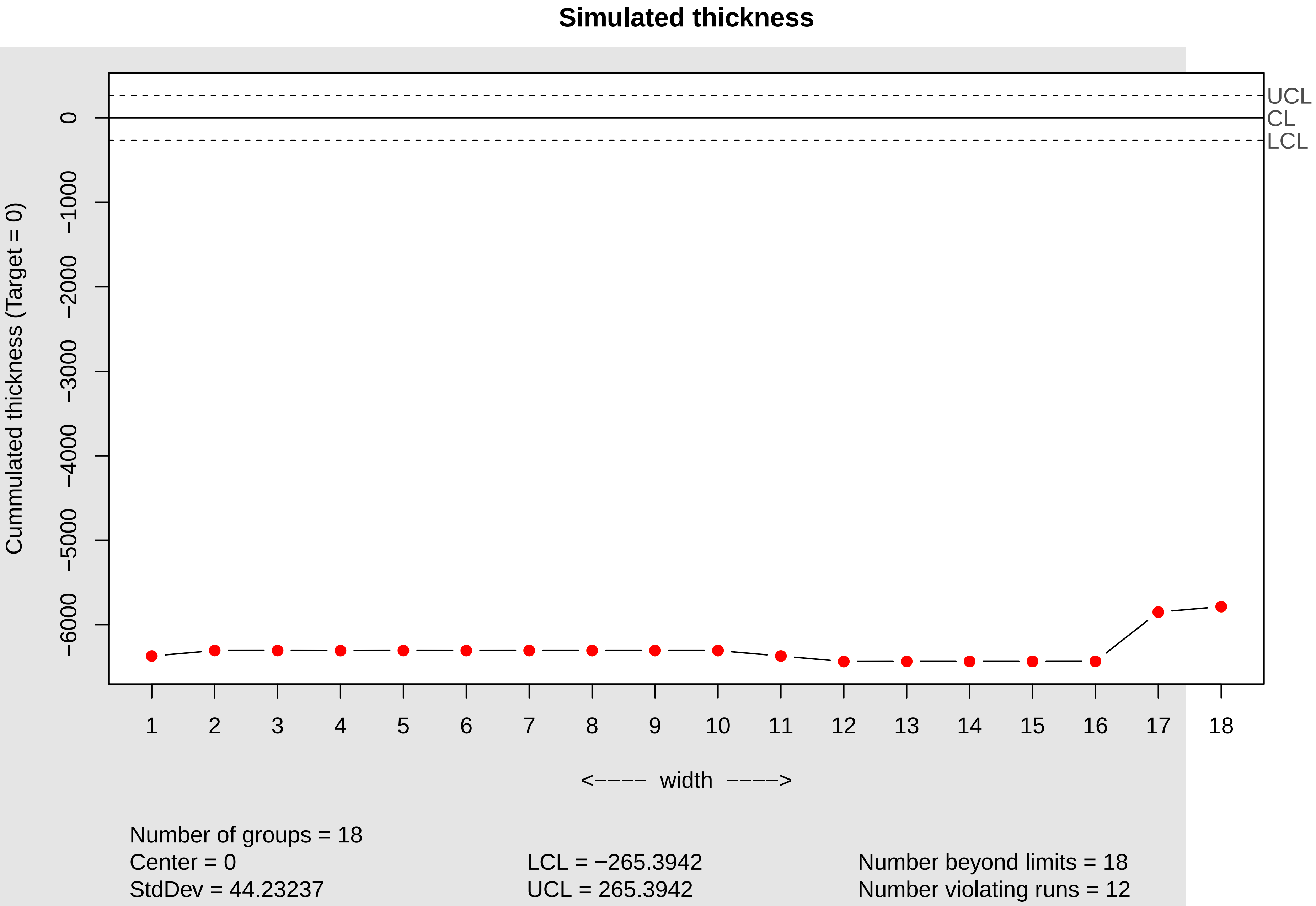
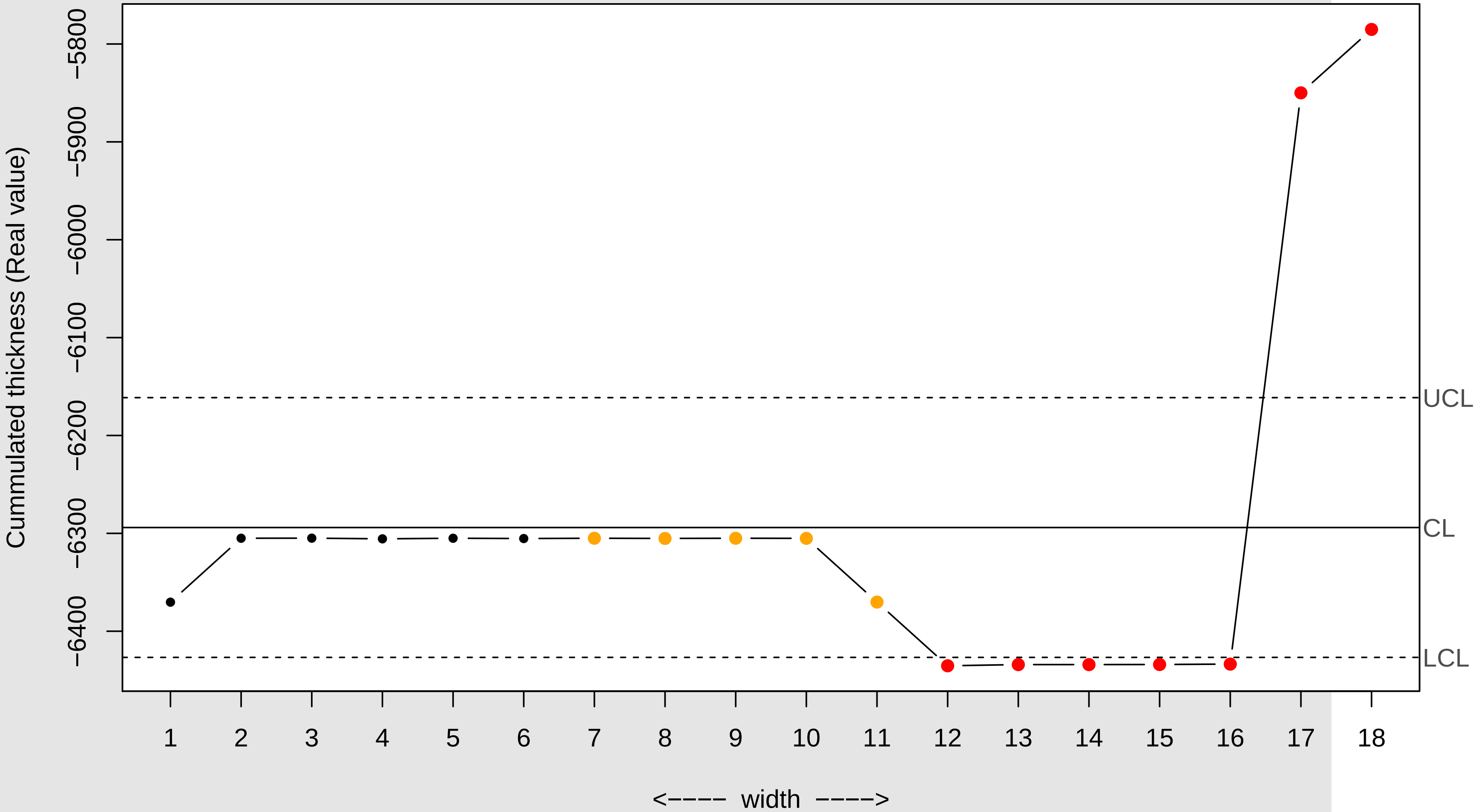


Individual thickness only


Simulated thickness
Individual thickness
136
138
140
142
144
146
−5800
−5900
−6000
−6100
−6200
−6300
−6400
5
10
15
<---- width ---->


Simulated thickness
Cummulated thickness (Target = 0)
0
−1000
−2000
−3000
−4000
−5000
−6000
UCL
CL
LCL
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
<---- width ---->
Number of groups = 18
Center = 0
StdDev = 44.23237
LCL = −265.3942
UCL = 265.3942
Number beyond limits = 18
Number violating runs = 12

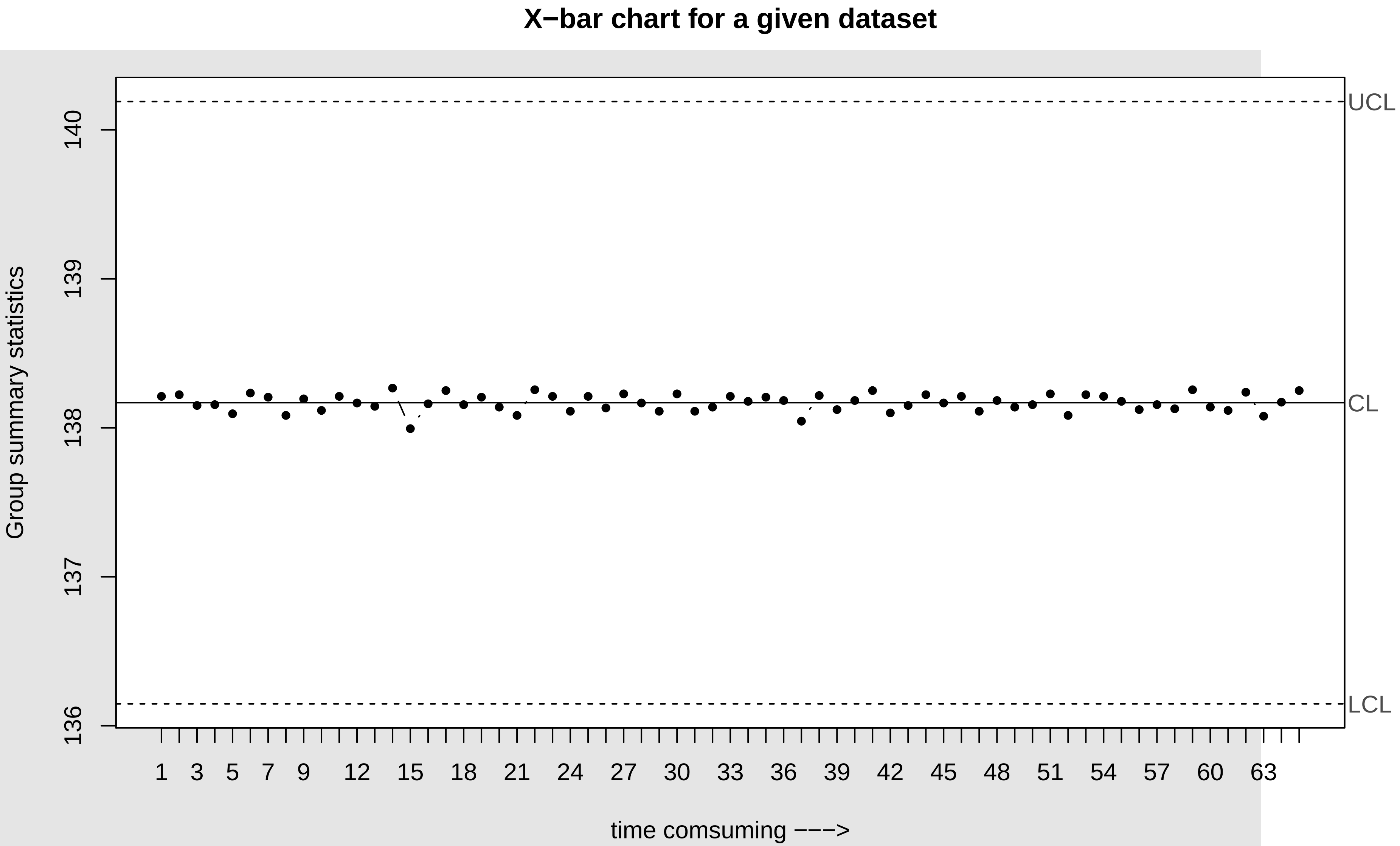
Simulated thickness: Cpk is −11.43 and z is −35.78.



Number of groups = 18
Center = −6294.039
StdDev = 44.23237

LCL = −6426.736
UCL = −6161.342

Number beyond limits = 7
Number violating runs = 10



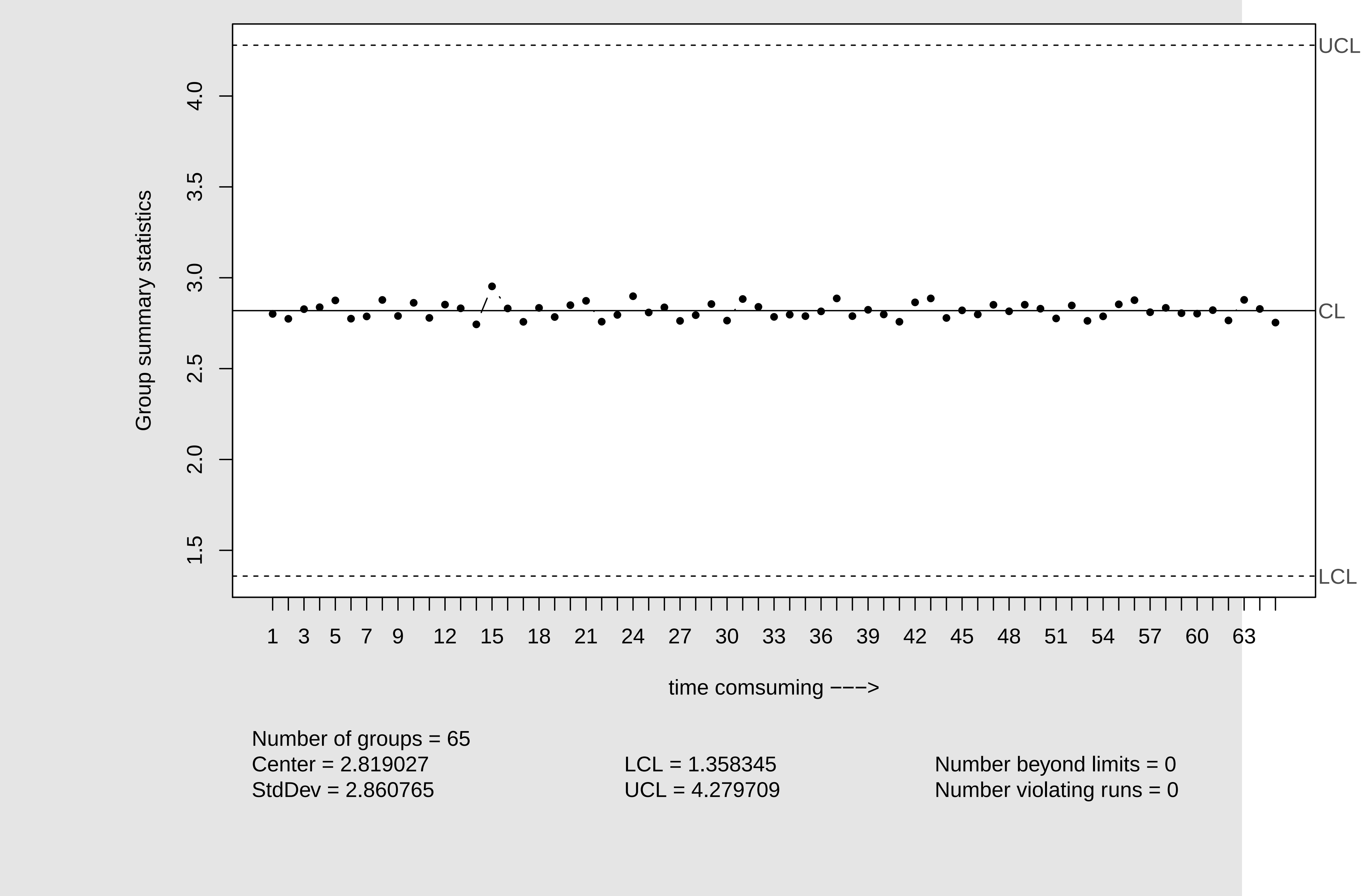
X−bar chart for a given dataset

Number of groups = 65
Center = 138.1686
StdDev = 2.858833

LCL = 136.1471
UCL = 140.1901

Number beyond limits = 0
Number violating runs = 0

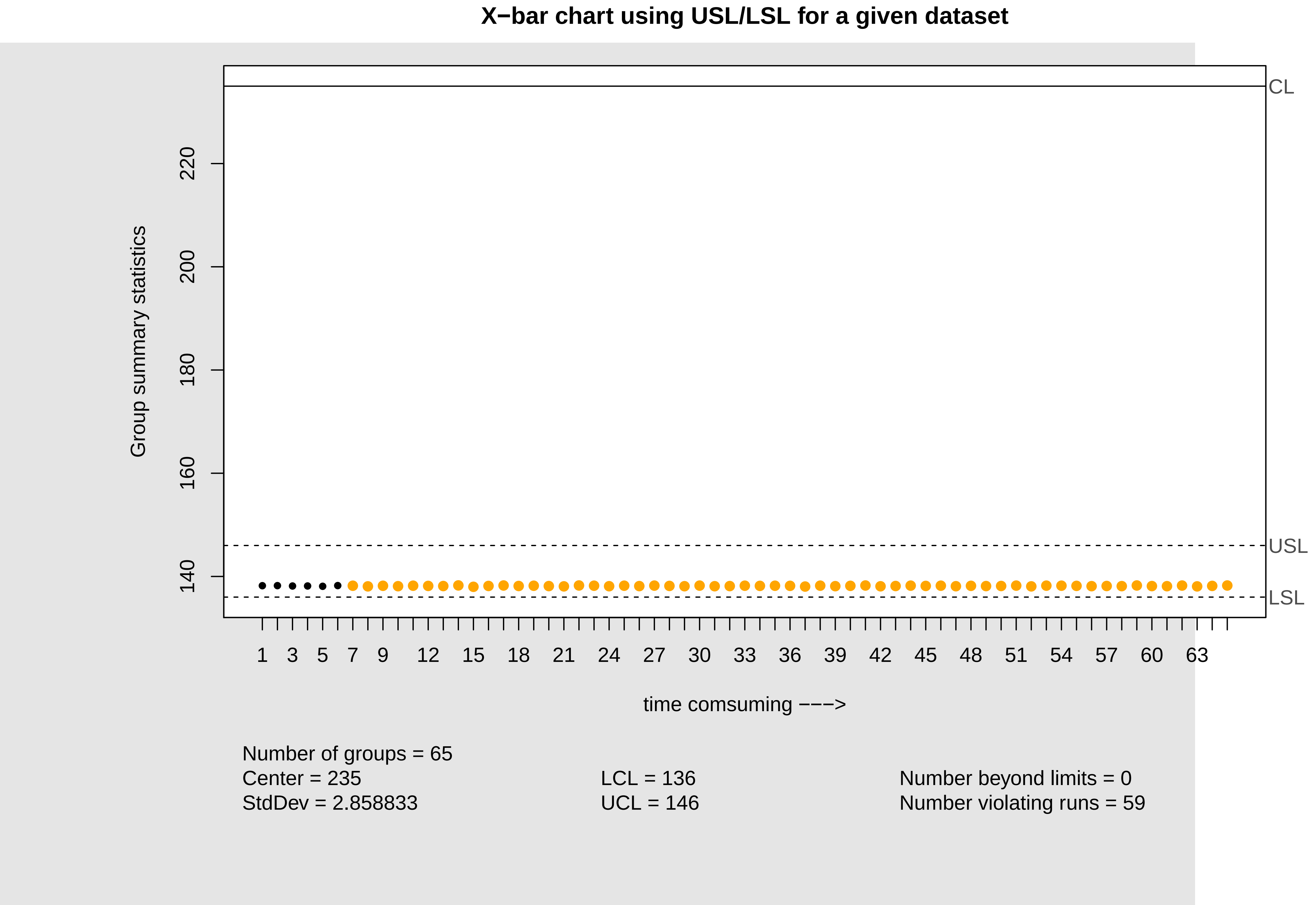
S chart for a given dataset

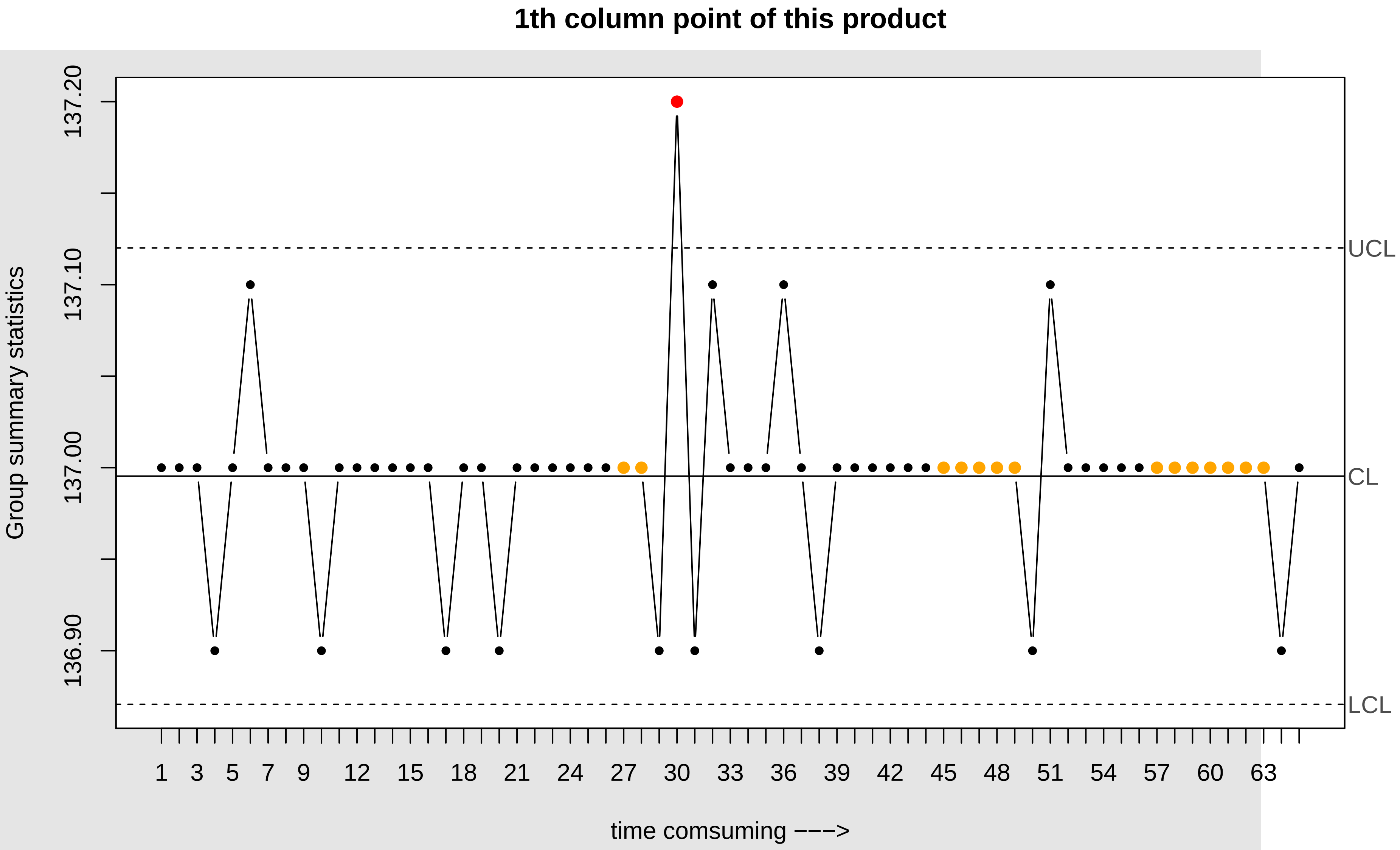


Number of groups = 65
Center = 2.819027
StdDev = 2.860765

LCL = 1.358345
UCL = 4.279709

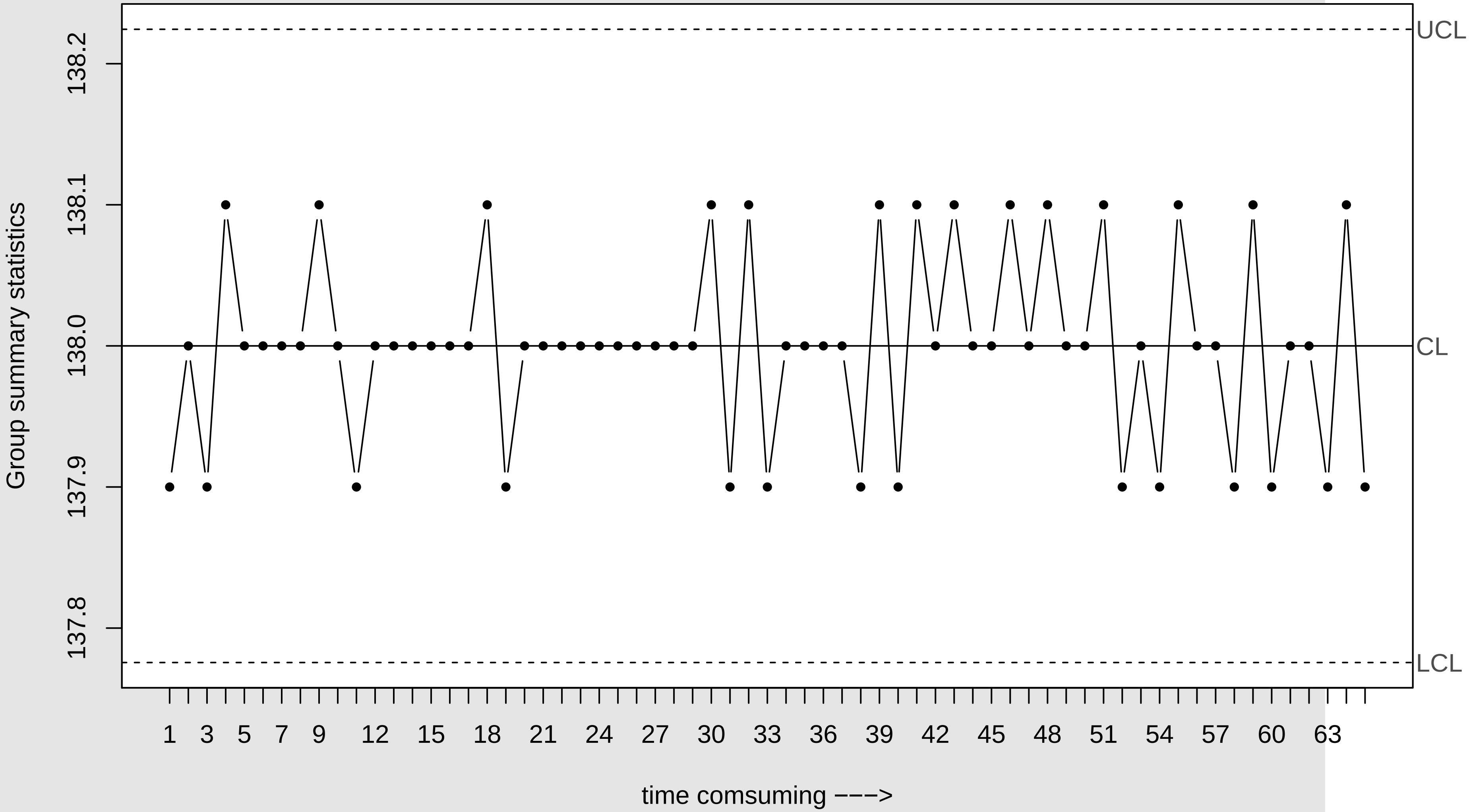
Number beyond limits = 0
Number violating runs = 0


X−bar chart using USL/LSL for a given dataset
Group summary statistics
220
200
180
160
140
CL
USL
LSL
1
3
5
7
9
12
15
18
21
24
27
30
33
36
39
42
45
48
51
54
57
60
63
time comsuming −−−>
Number of groups = 65
Center = 235
StdDev = 2.858833
LCL = 136
UCL = 146
Number beyond limits = 0
Number violating runs = 59



```
Number of groups = 65
Center = 136.9954                  LCL = 136.8707                  Number beyond limits = 1
StdDev = 0.04155585                UCL = 137.1201                  Number violating runs = 14
```

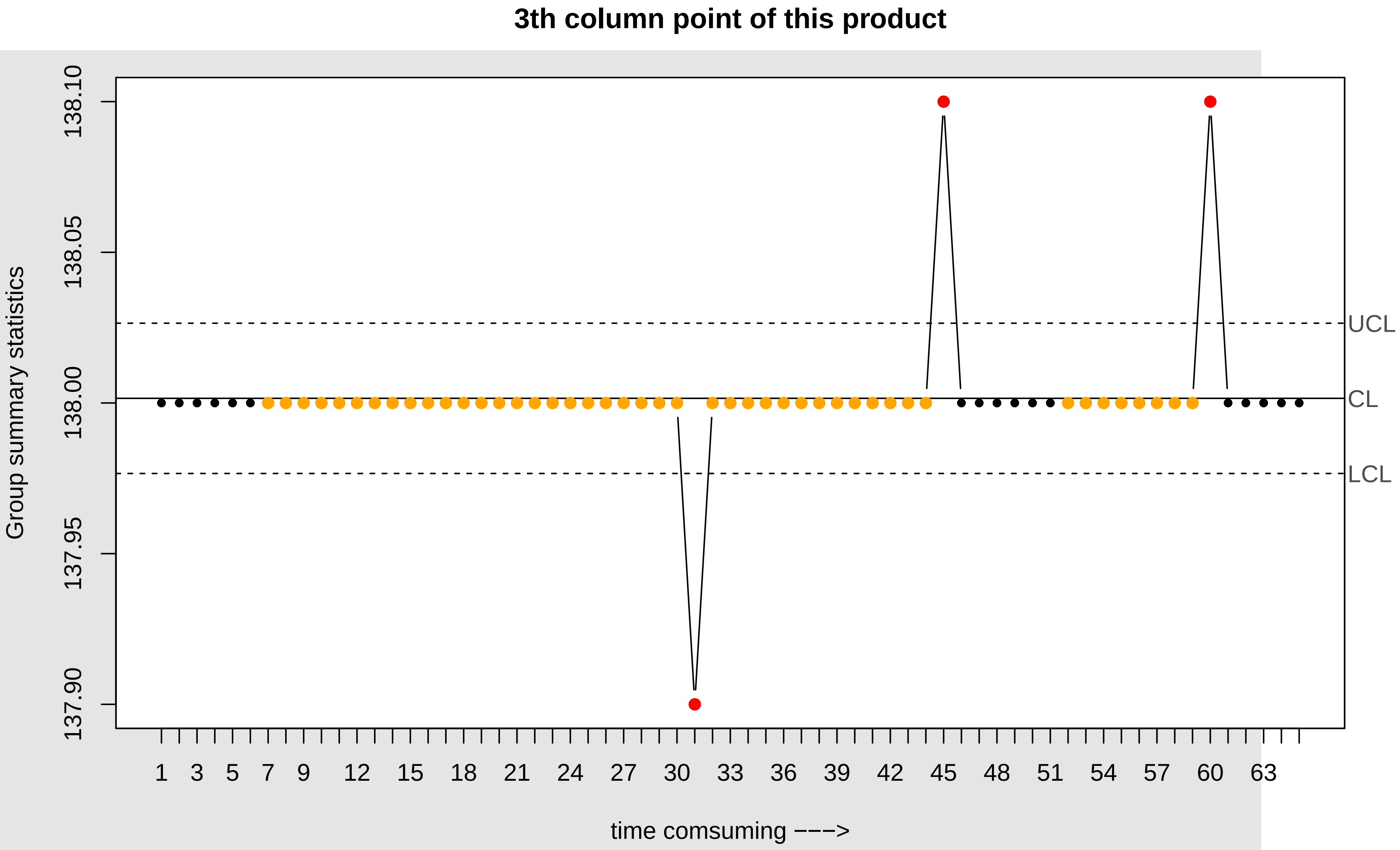
2th column point of this product



Number of groups = 65
Center = 138
StdDev = 0.07480053

LCL = 137.7756
UCL = 138.2244

Number beyond limits = 0
Number violating runs = 0

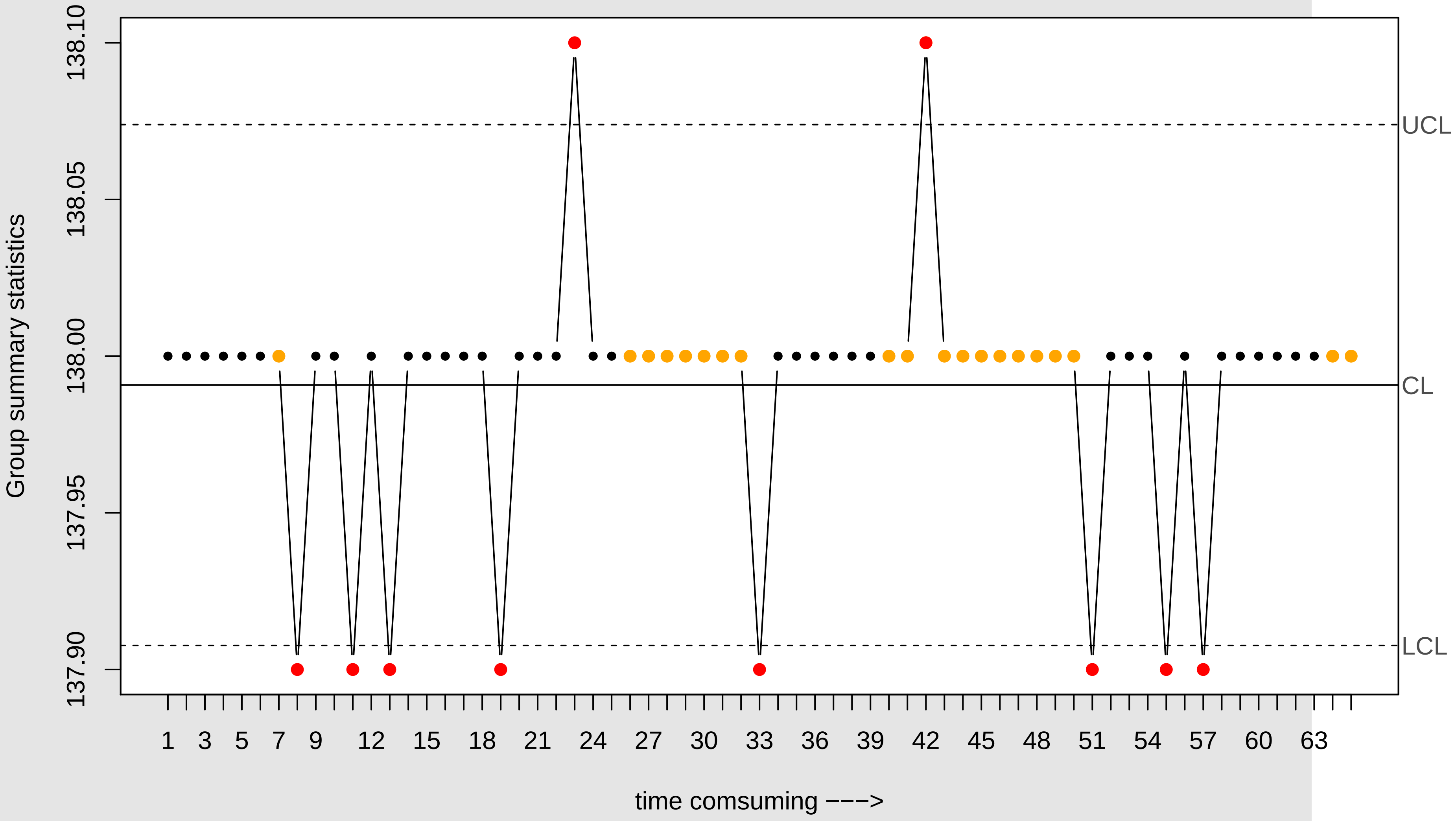


Number of groups = 65
Center = 138.0015
StdDev = 0.00831117

LCL = 137.9766
UCL = 138.0265

Number beyond limits = 3
Number violating runs = 46

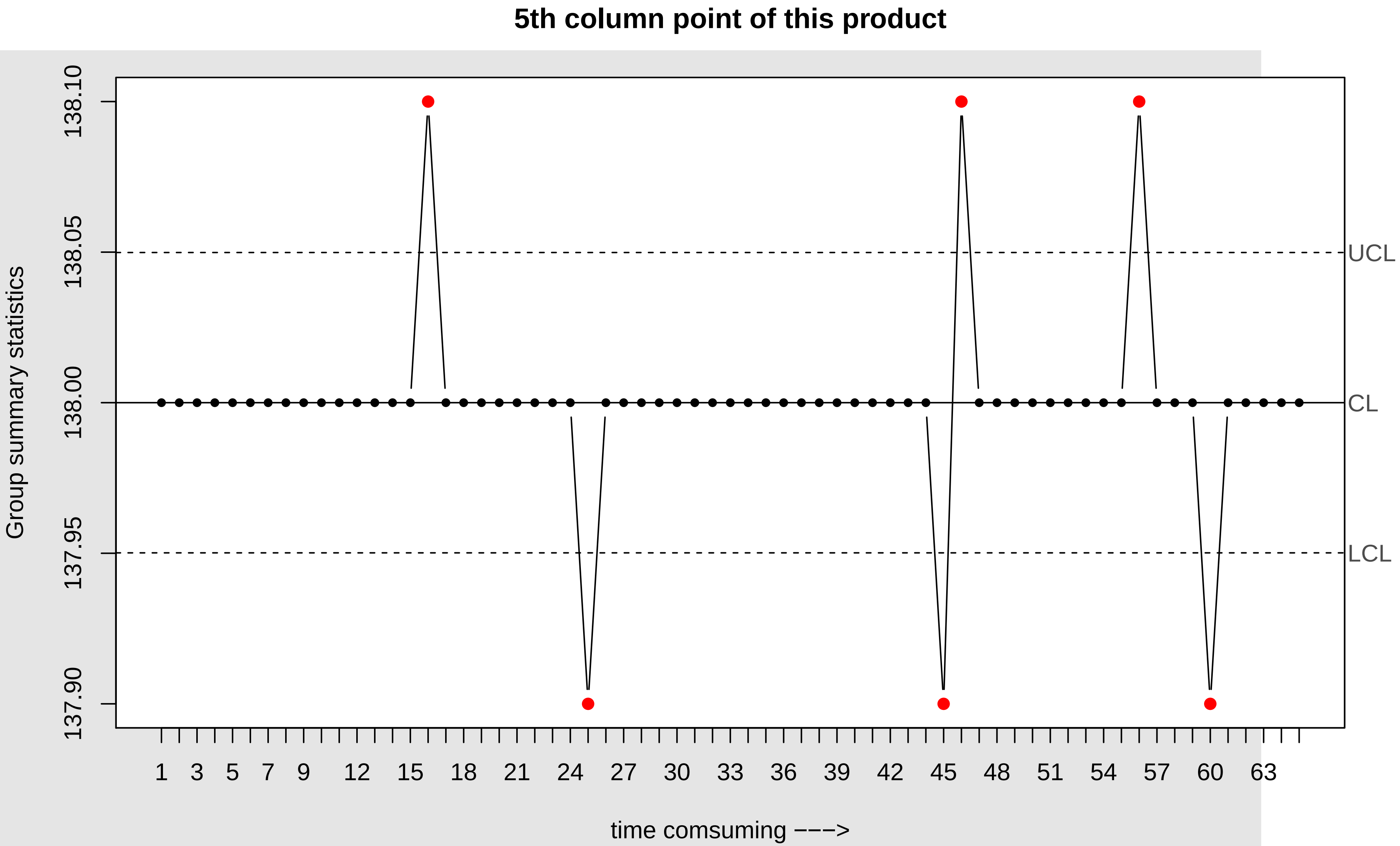
4th column point of this product



Number of groups = 65
Center = 137.9908
StdDev = 0.0277039

LCL = 137.9077
UCL = 138.0739

Number beyond limits = 10
Number violating runs = 21

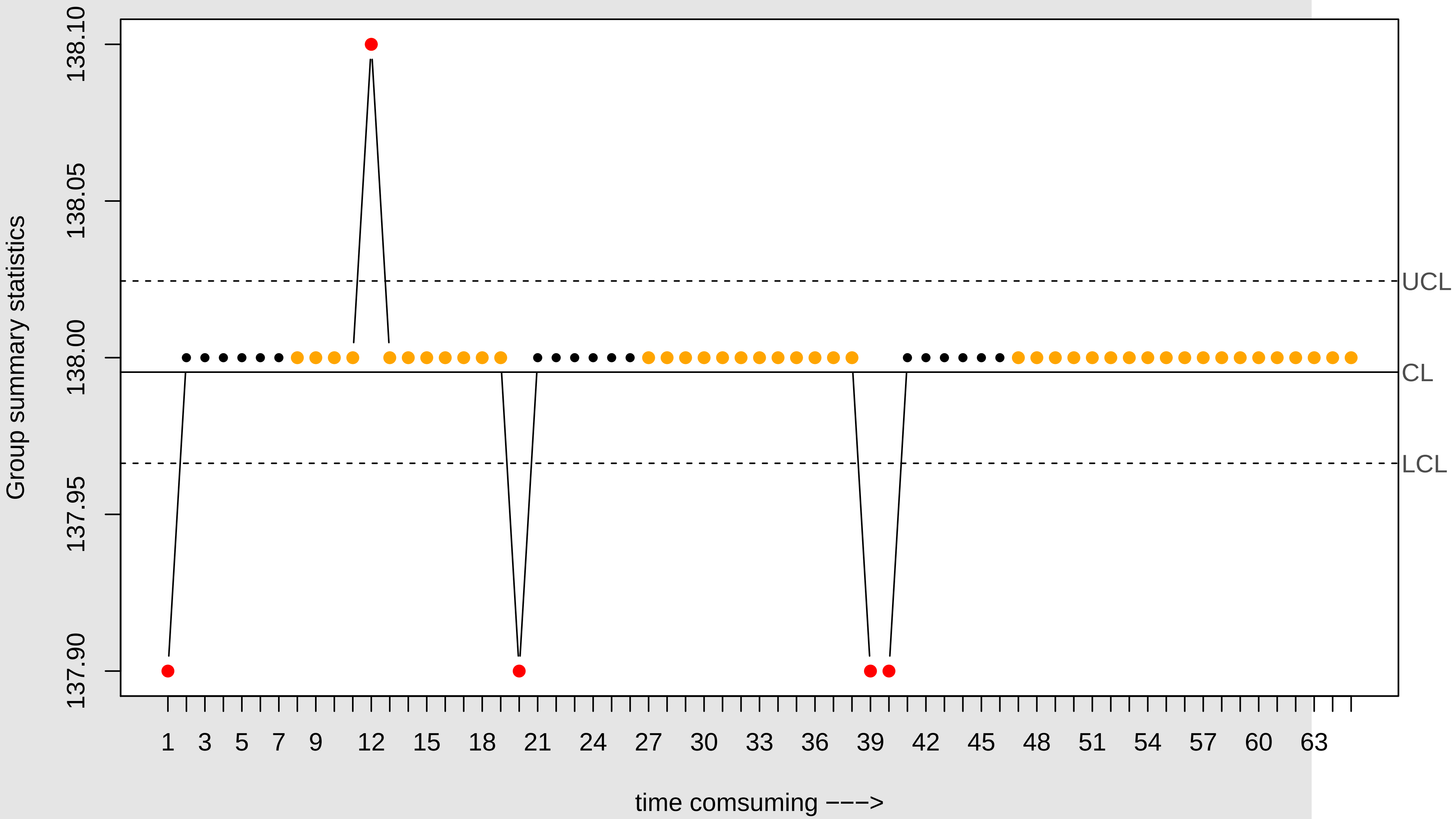


Number of groups = 65
Center = 138
StdDev = 0.01662234

LCL = 137.9501
UCL = 138.0499

Number beyond limits = 6
Number violating runs = 0

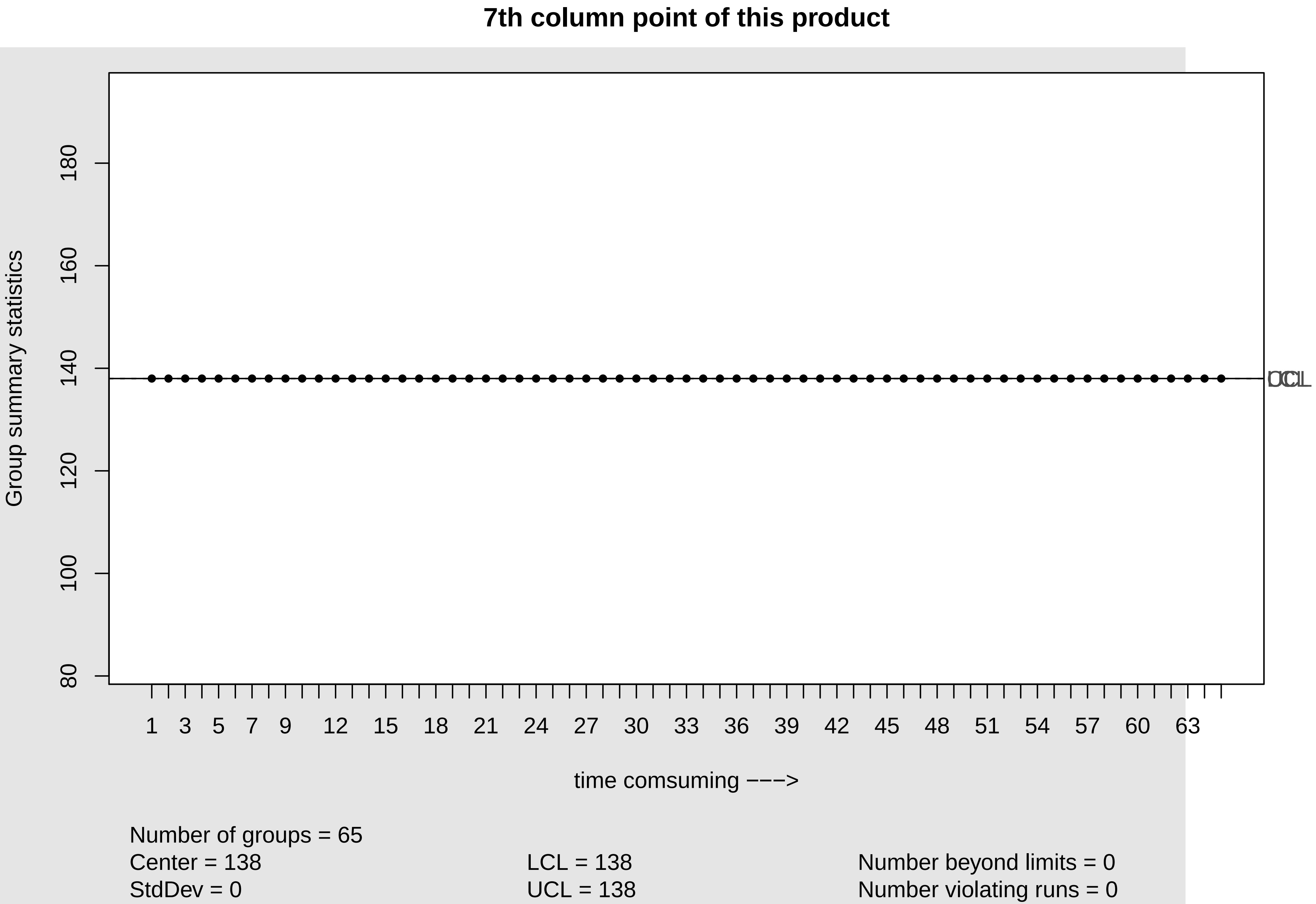
6th column point of this product



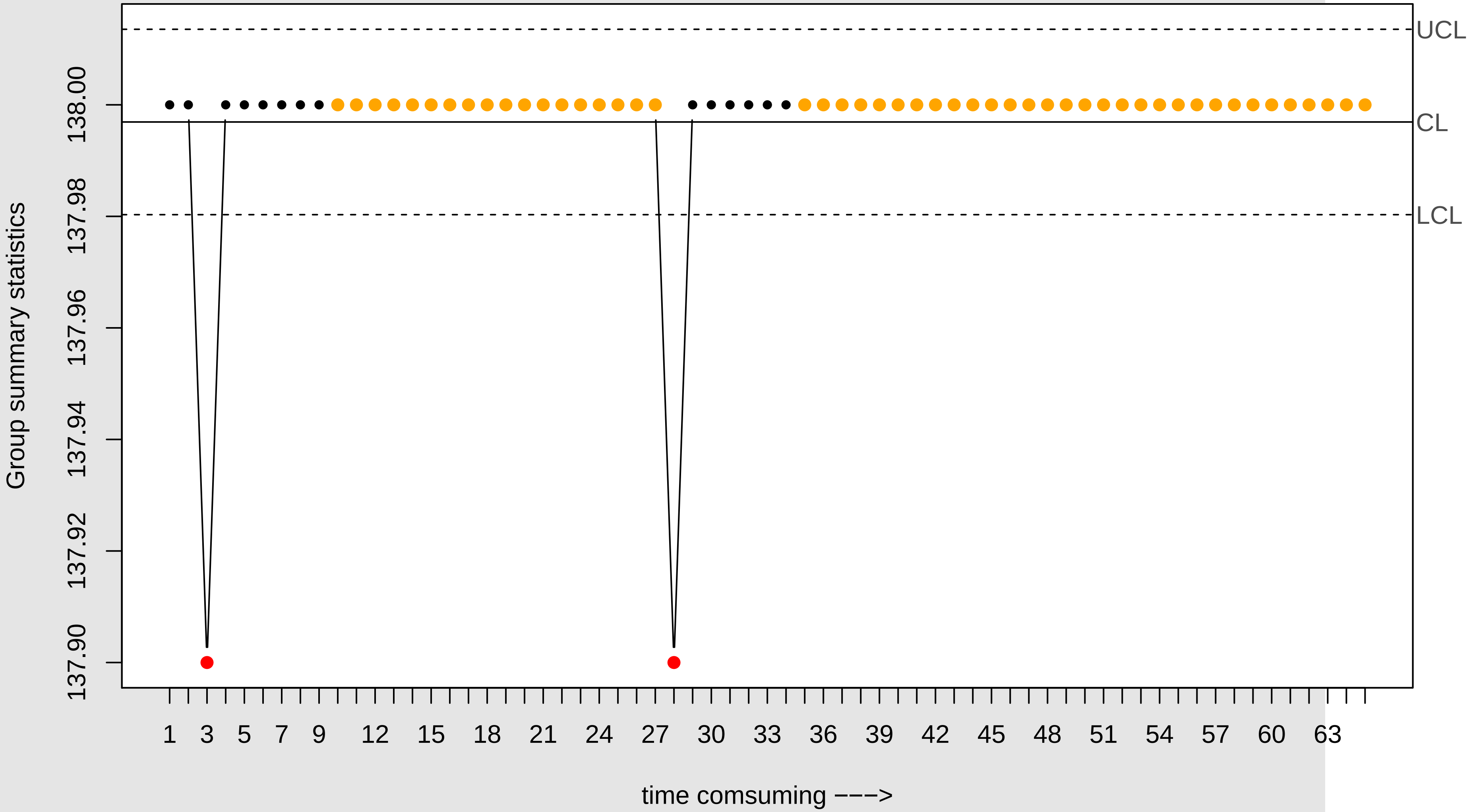
Number of groups = 65
Center = 137.9954
StdDev = 0.009696365

LCL = 137.9663
UCL = 138.0245

Number beyond limits = 5
Number violating runs = 43


7th column point of this product
Group summary statistics
180
160
140
120
100
80
1
3
5
7
9
12
15
18
21
24
27
30
33
36
39
42
45
48
51
54
57
60
63
time comsuming −−−>
UCL
CL
LCL
Number of groups = 65
Center = 138
StdDev = 0
LCL = 138
UCL = 138
Number beyond limits = 0
Number violating runs = 0

8th column point of this product

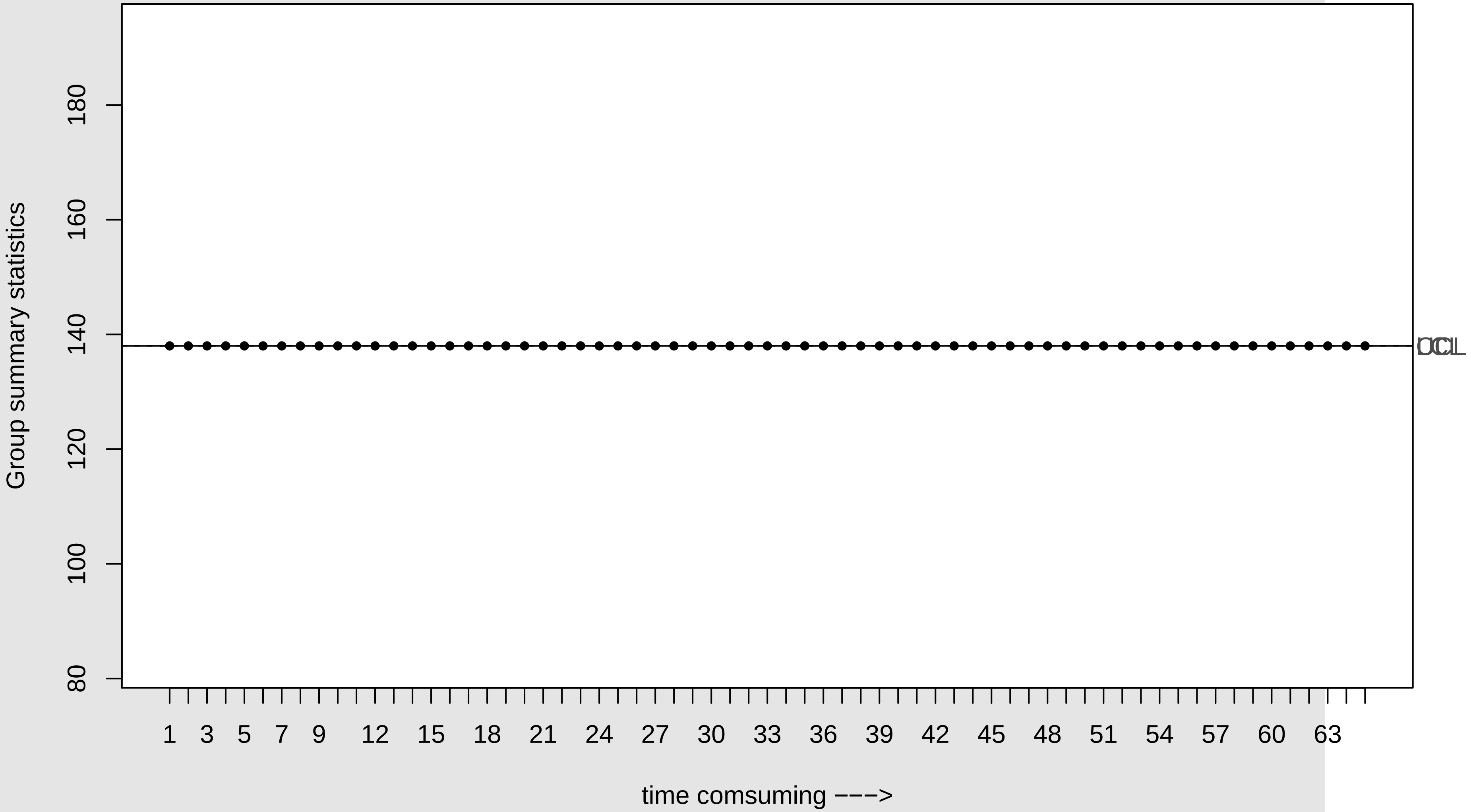


Number of groups = 65
Center = 137.9969
StdDev = 0.00554078

LCL = 137.9803
UCL = 138.0135

Number beyond limits = 2
Number violating runs = 49

9th column point of this product

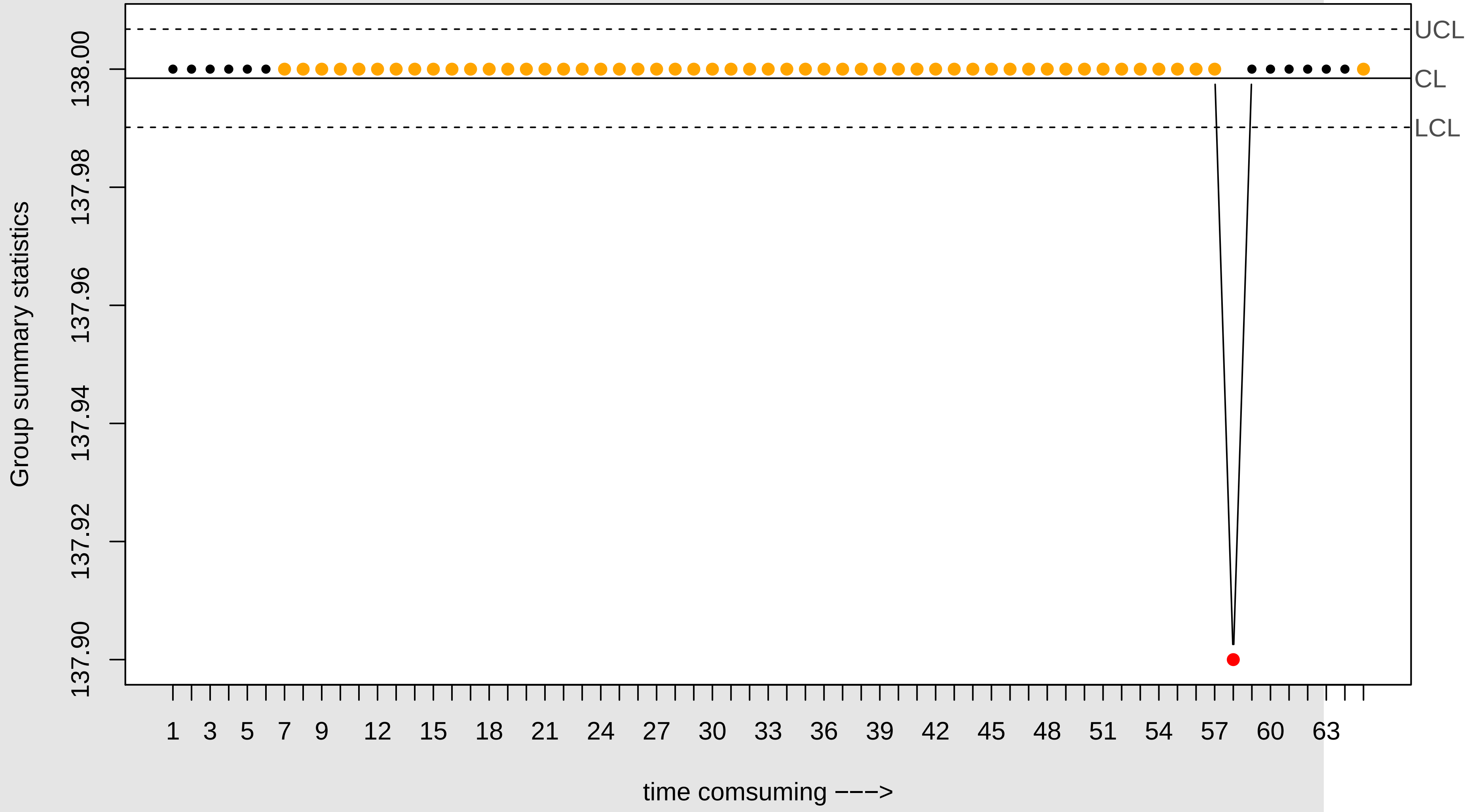


Number of groups = 65
Center = 138
StdDev = 0

LCL = 138
UCL = 138

Number beyond limits = 0
Number violating runs = 0

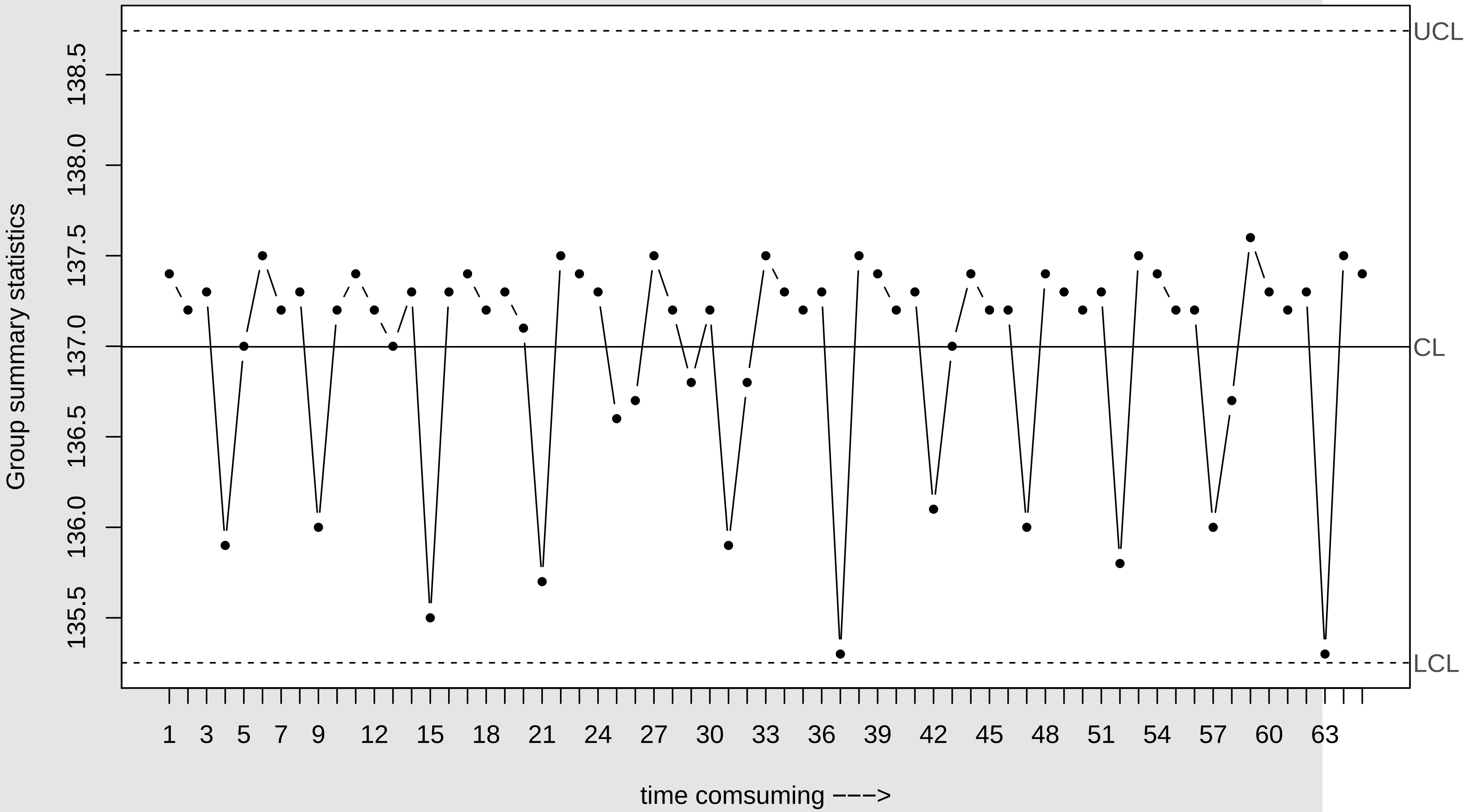
10th column point of this product



Number of groups = 65
Center = 137.9985
StdDev = 0.00277039

LCL = 137.9902
UCL = 138.0068

Number beyond limits = 1
Number violating runs = 52

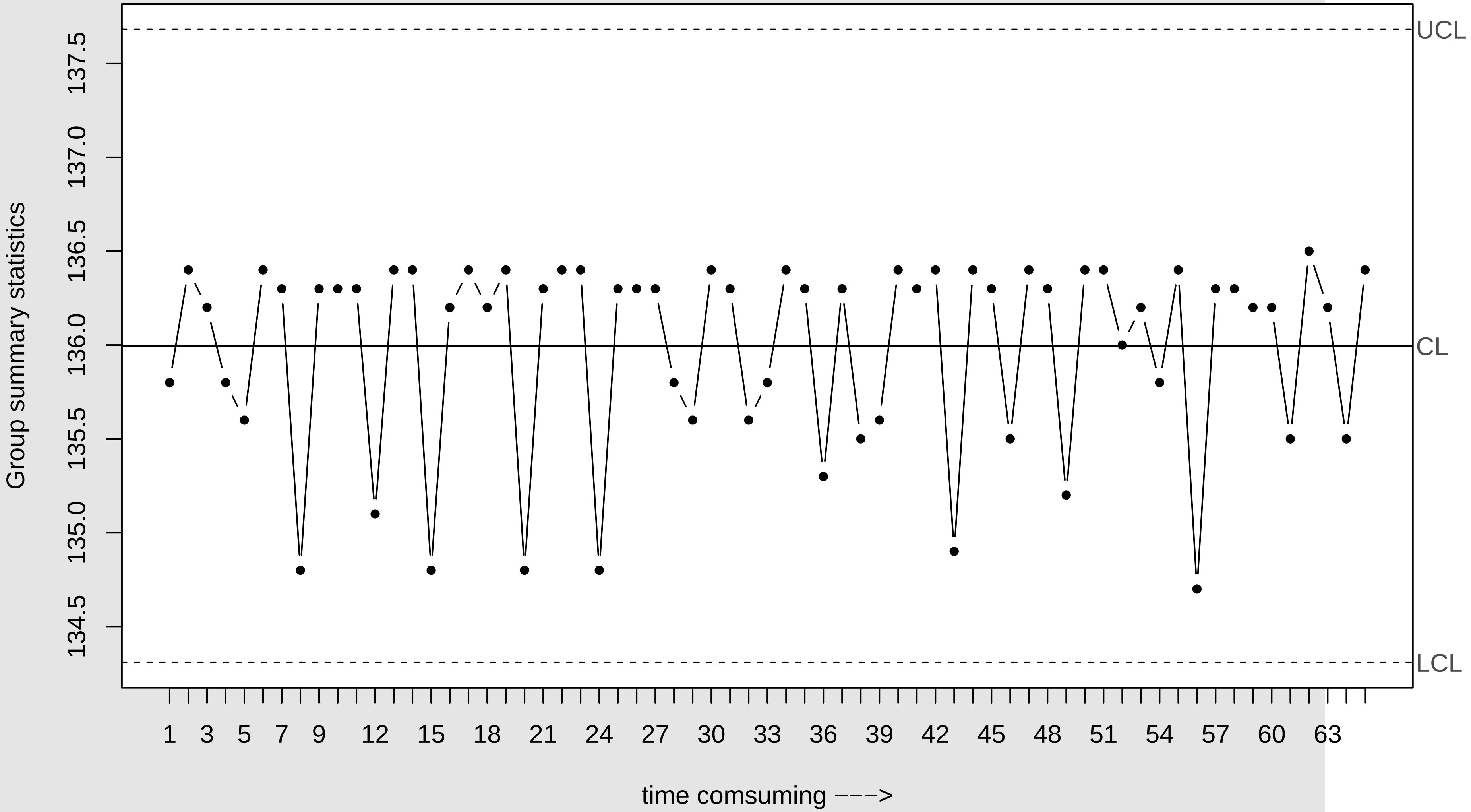


11th column point of this product

Number of groups = 65
Center = 136.9969
StdDev = 0.5817819

LCL = 135.2516
UCL = 138.7423

Number beyond limits = 0
Number violating runs = 0

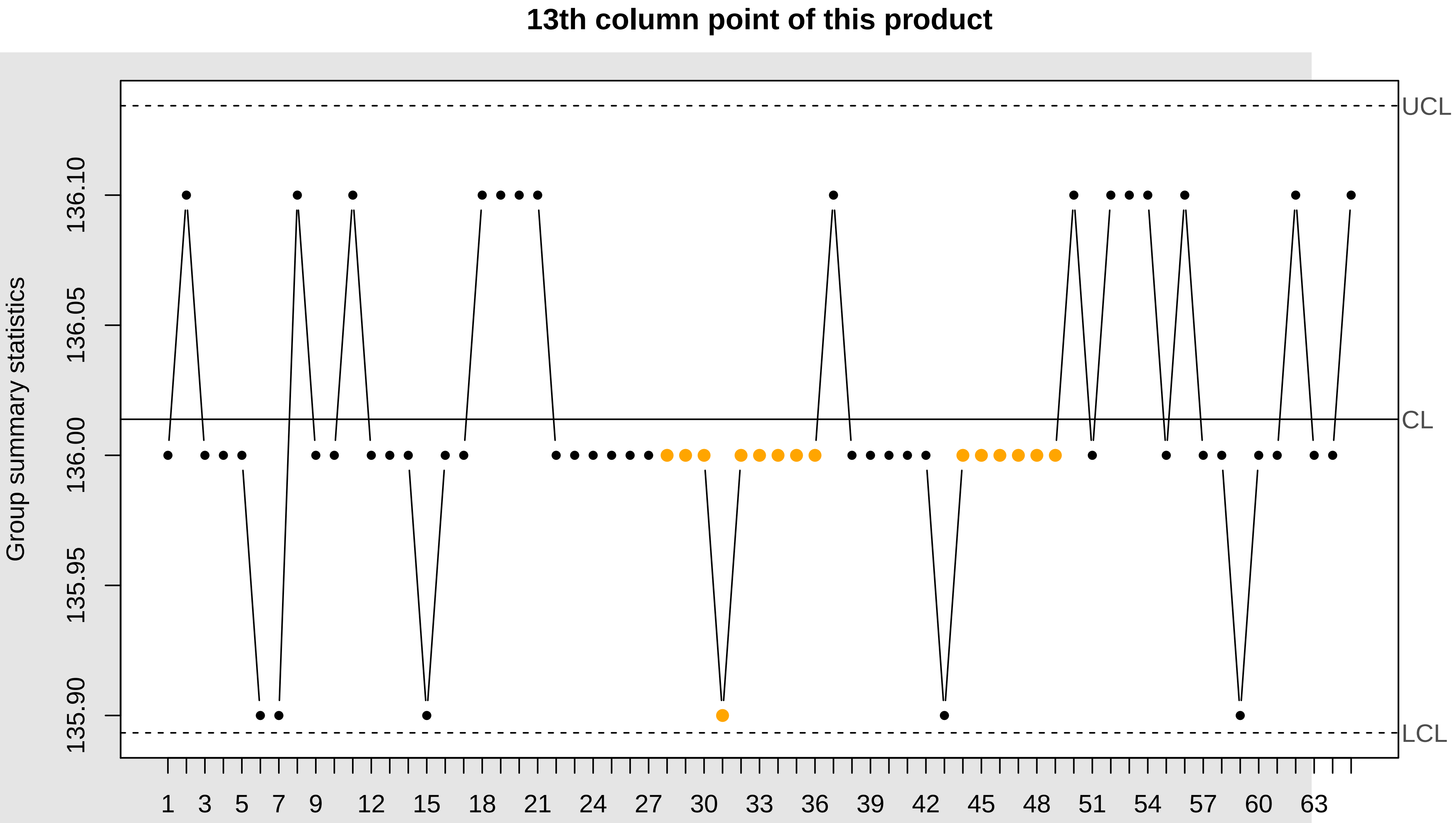


12th column point of this product

Number of groups = 65
Center = 135.9954
StdDev = 0.5623892

LCL = 134.3082
UCL = 137.6826

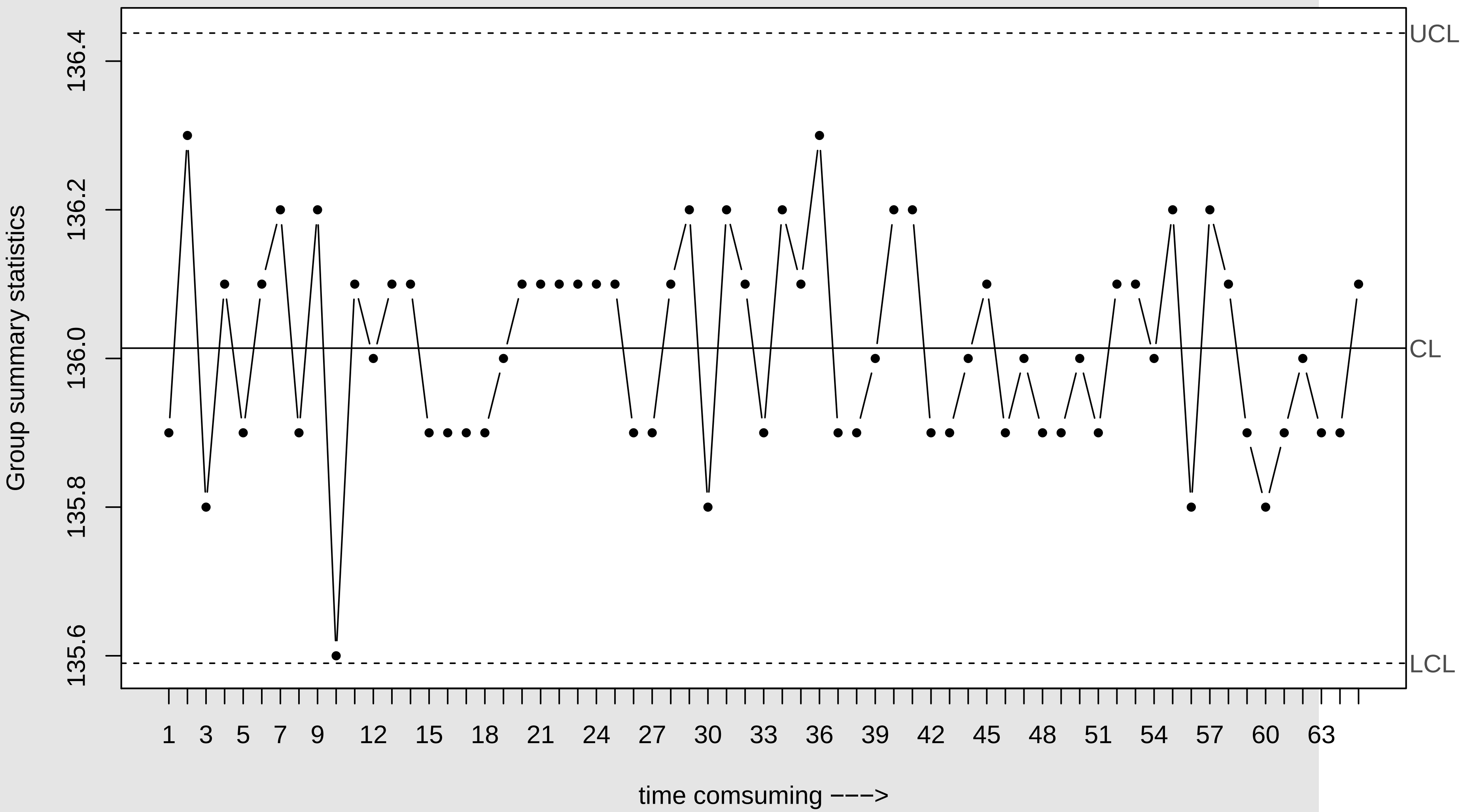
Number beyond limits = 0
Number violating runs = 0



Number of groups = 65
Center = 136.0138
StdDev = 0.04017066

LCL = 135.8933
UCL = 136.1344

Number beyond limits = 0
Number violating runs = 15



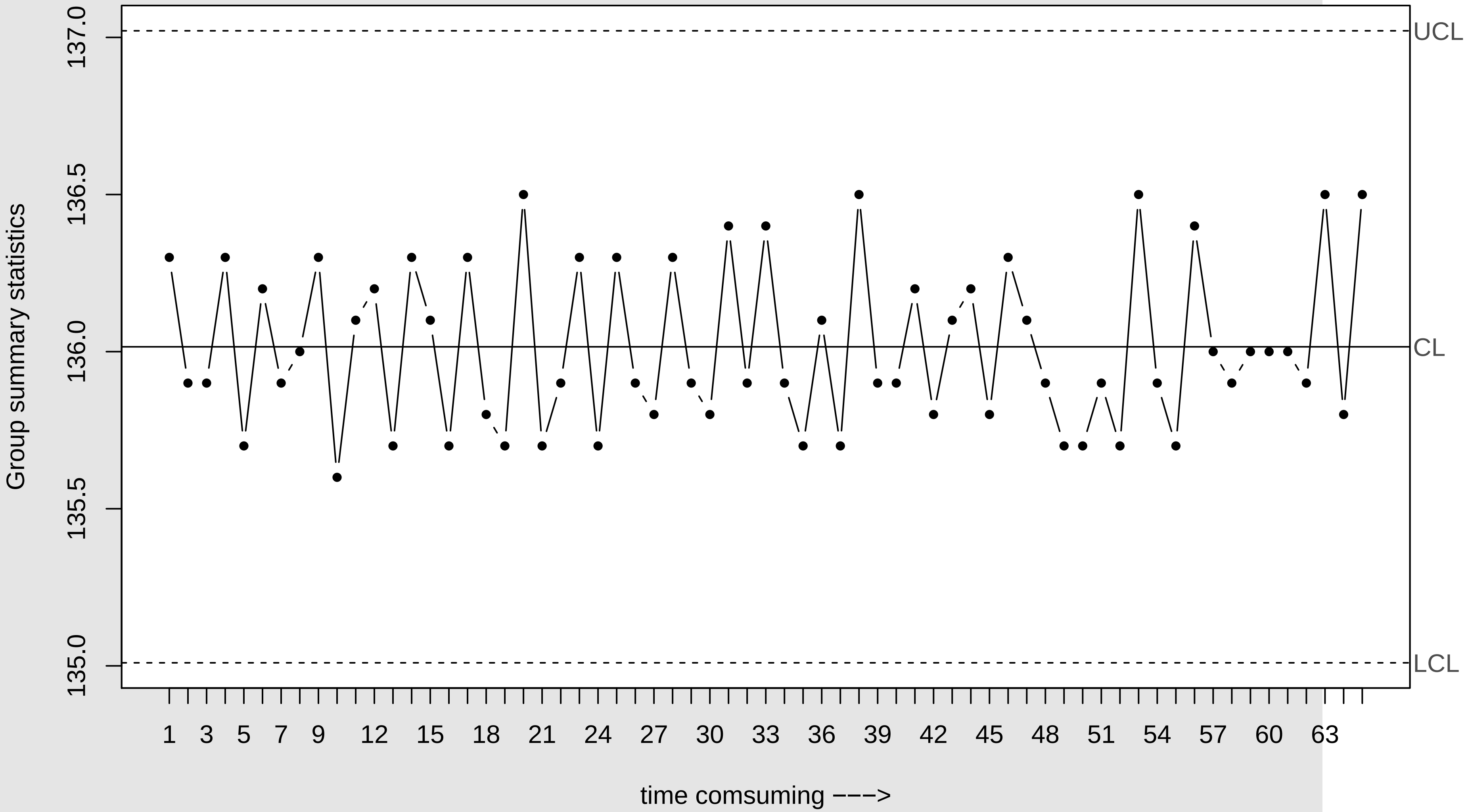
14th column point of this product

Number of groups = 65
Center = 136.0138
StdDev = 0.1412899

LCL = 135.59
UCL = 136.4377

Number beyond limits = 0
Number violating runs = 0

15th column point of this product

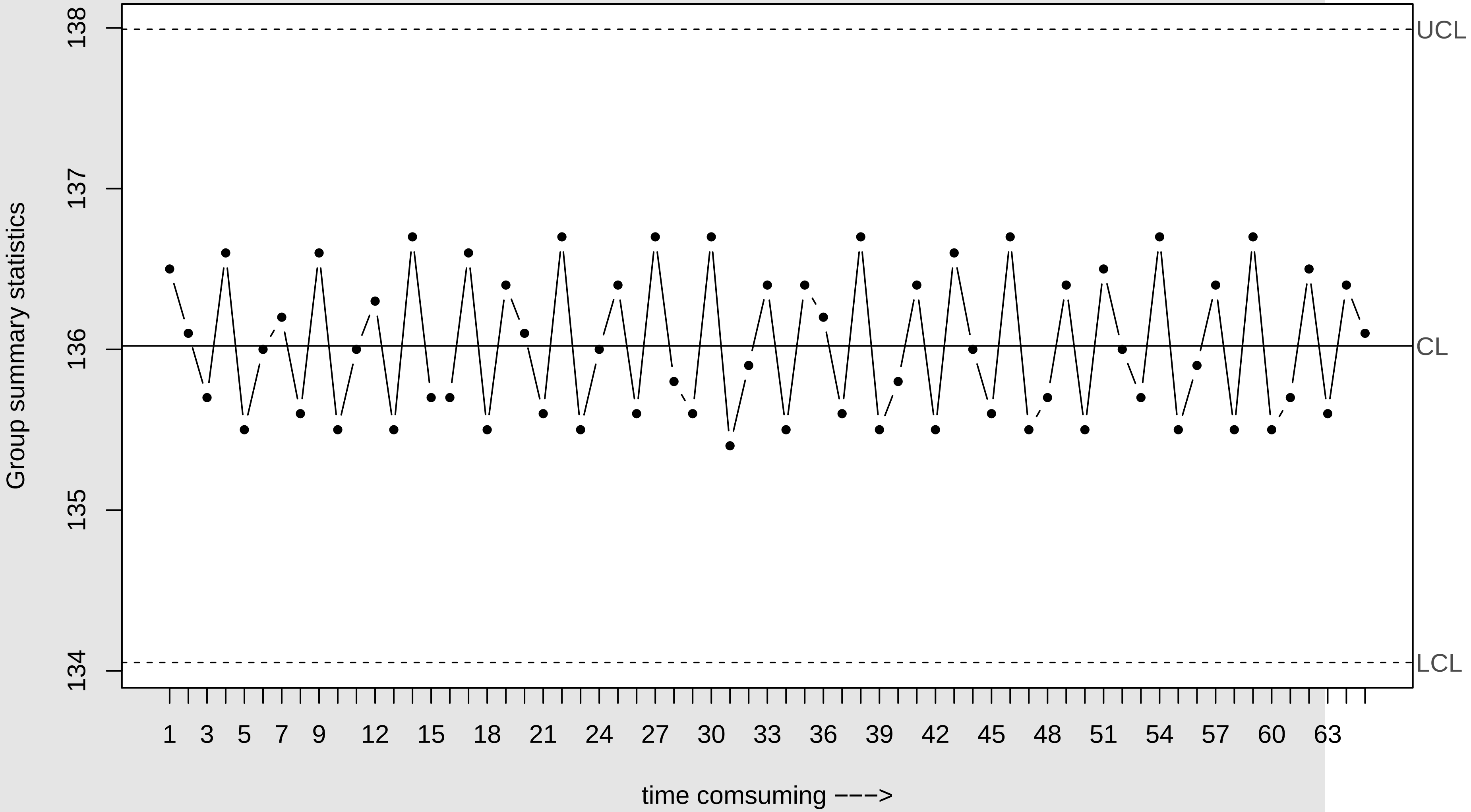


Number of groups = 65
Center = 136.0154
StdDev = 0.3352172

LCL = 135.0097
UCL = 137.021

Number beyond limits = 0
Number violating runs = 0

16th column point of this product

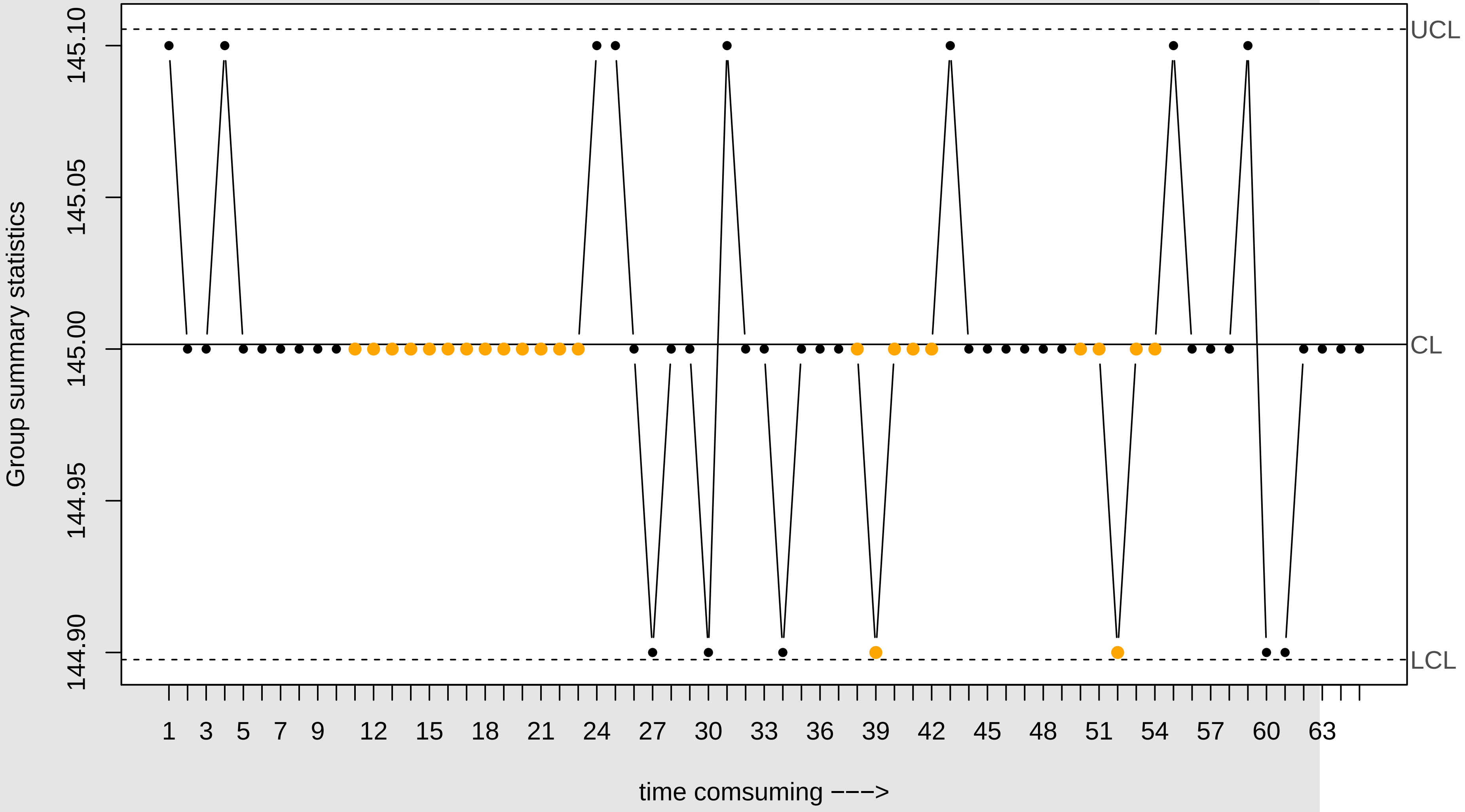


Number of groups = 65
Center = 136.0215
StdDev = 0.6565824

LCL = 134.0518
UCL = 137.9913

Number beyond limits = 0
Number violating runs = 0

17th column point of this product

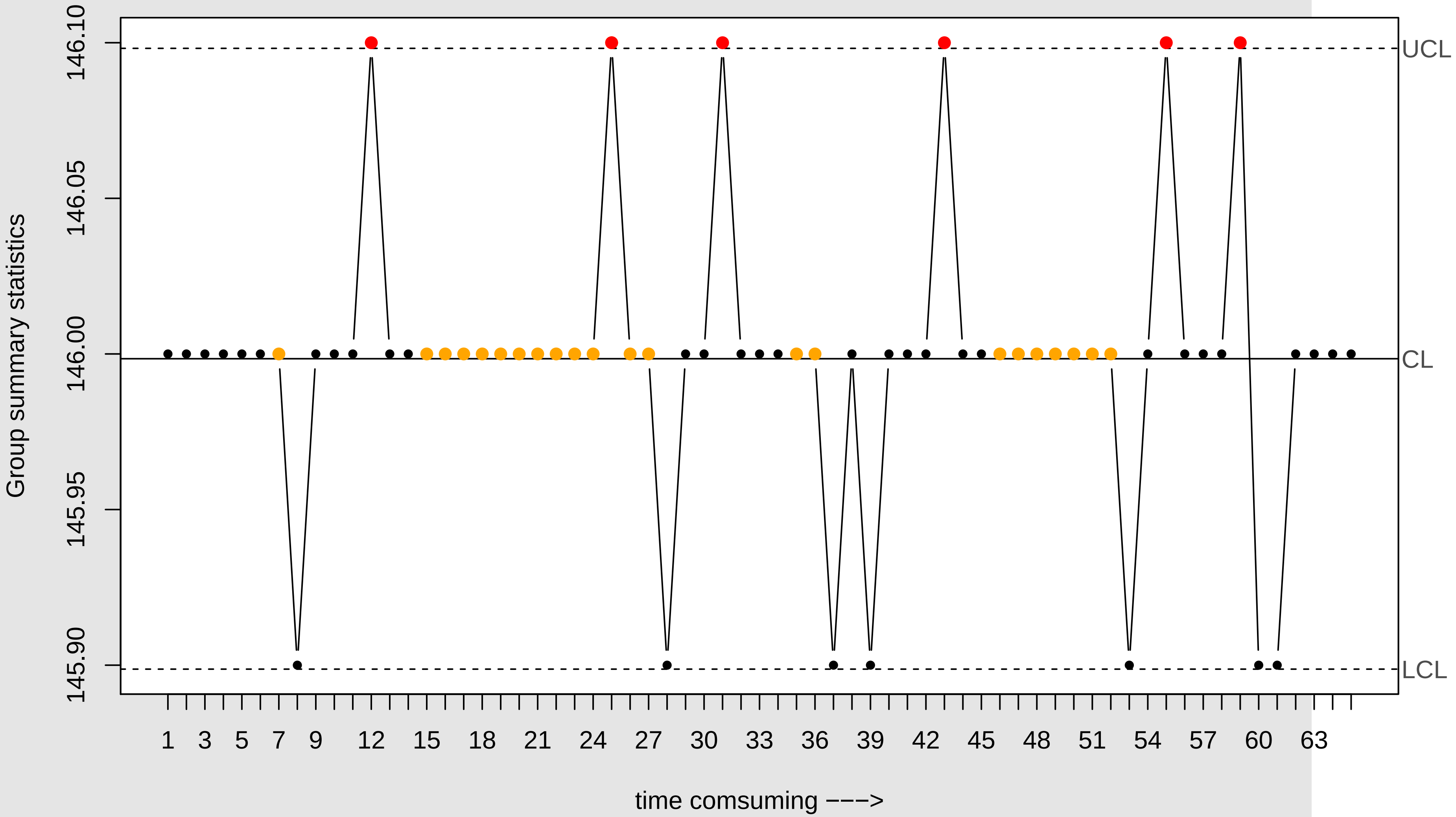


Number of groups = 65
Center = 145.0015
StdDev = 0.03462988

LCL = 144.8976
UCL = 145.1054

Number beyond limits = 0
Number violating runs = 23

18th column point of this product



Number of groups = 65
Center = 145.9985
StdDev = 0.03324468

LCL = 145.8987
UCL = 146.0982

Number beyond limits = 6
Number violating runs = 23