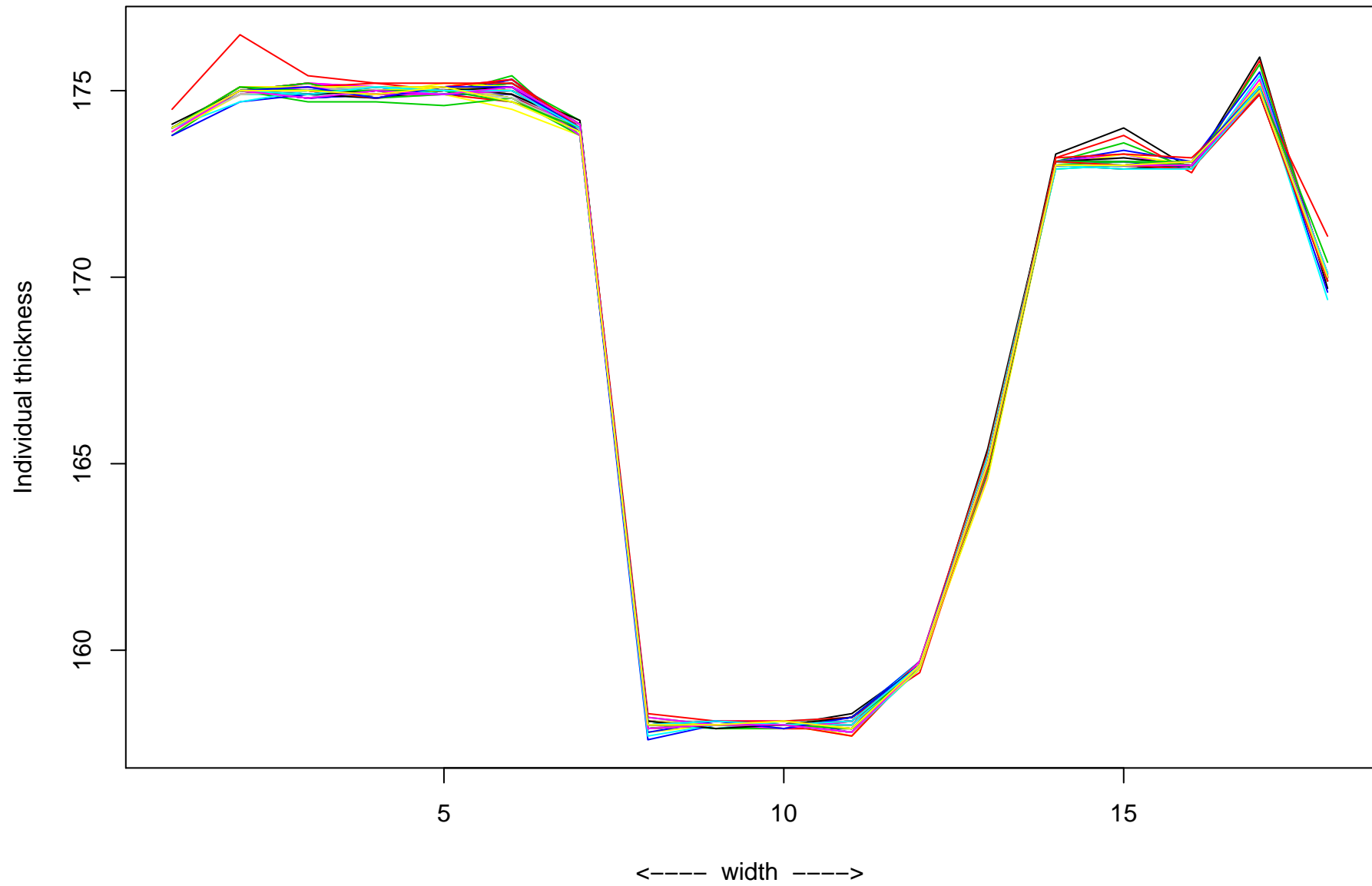
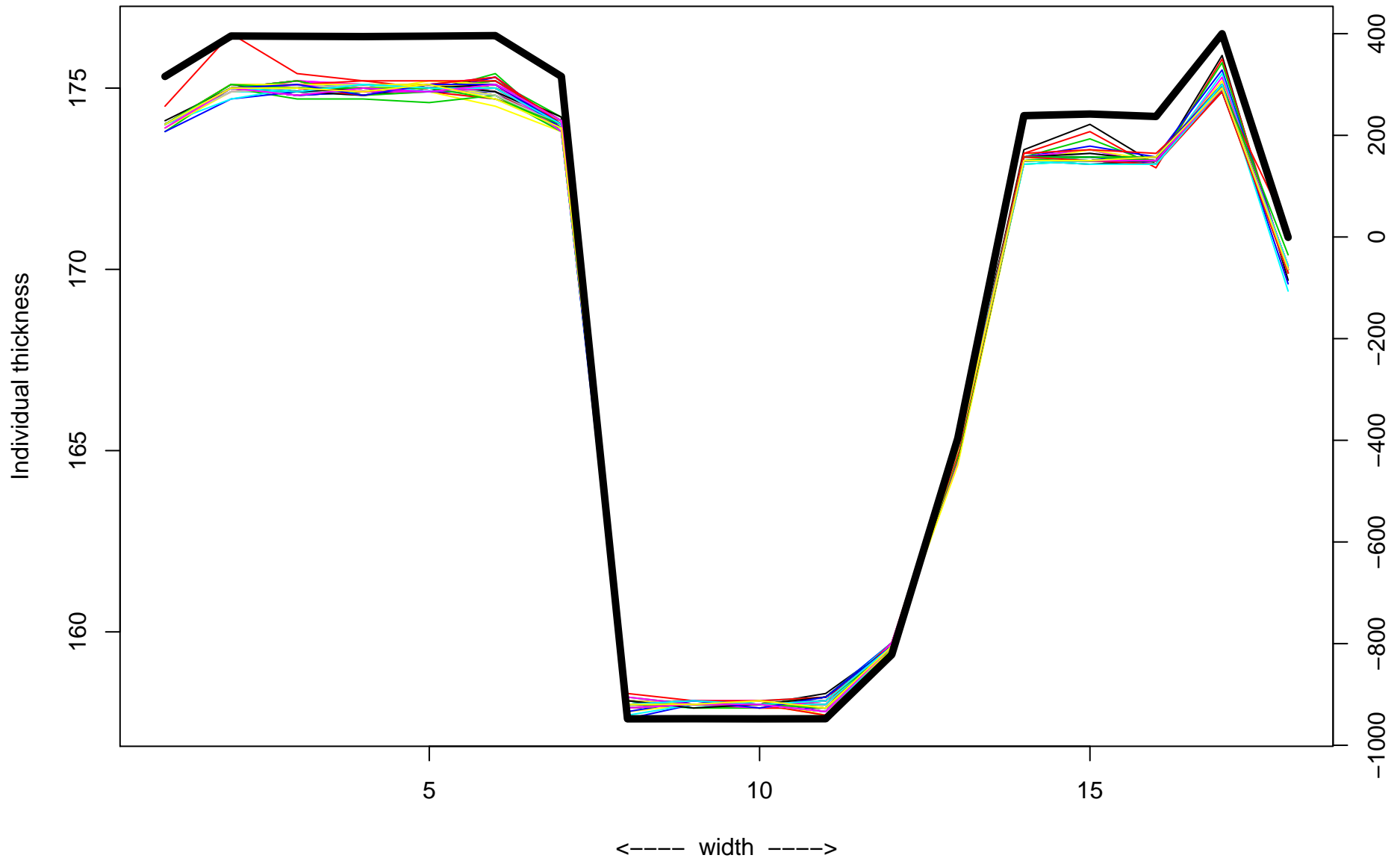


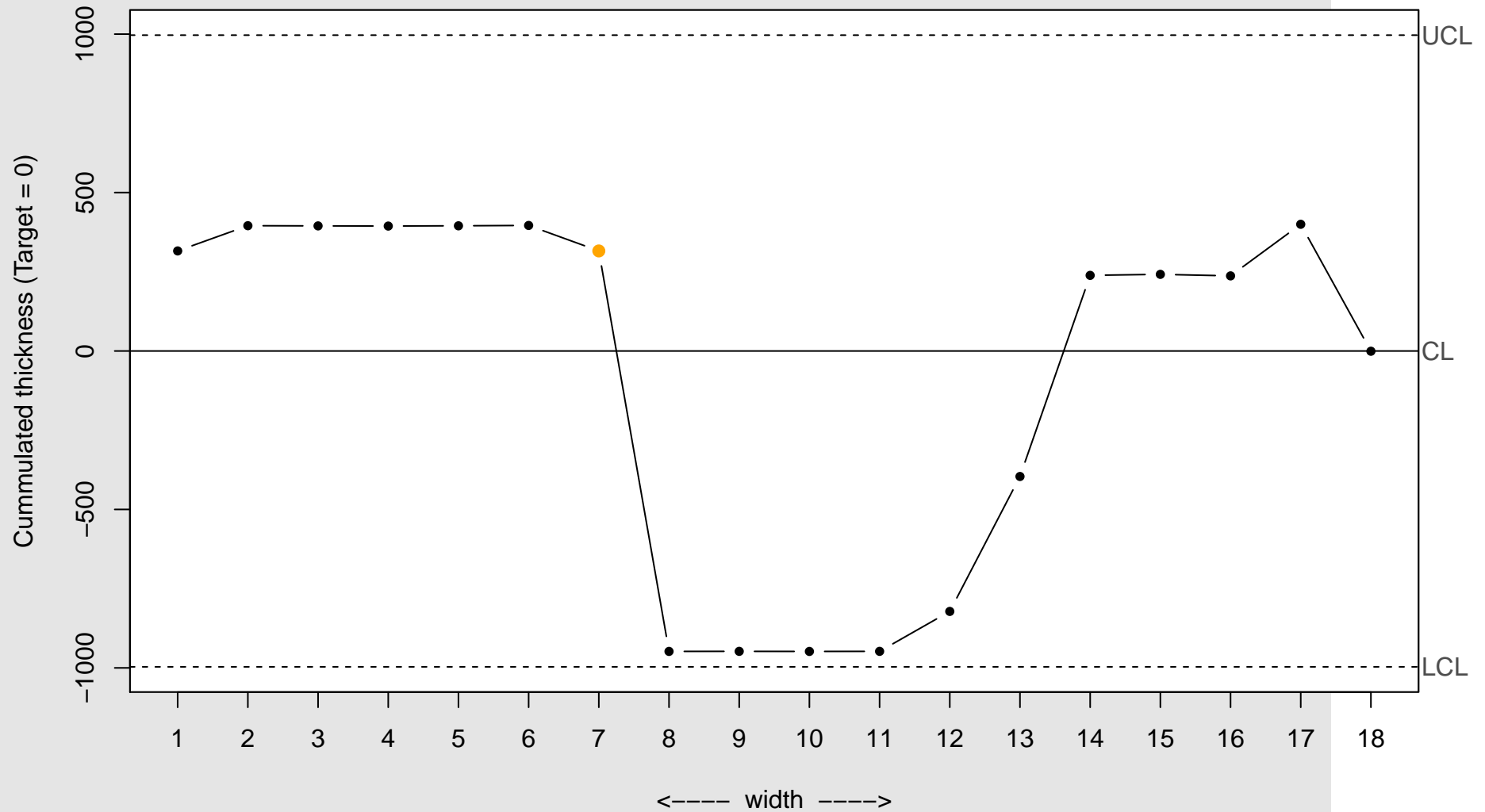
# Individual thickness only



# Simulated thickness



## Simulated thickness



Number of groups = 18

Center = 0

StdDev = 166.1191

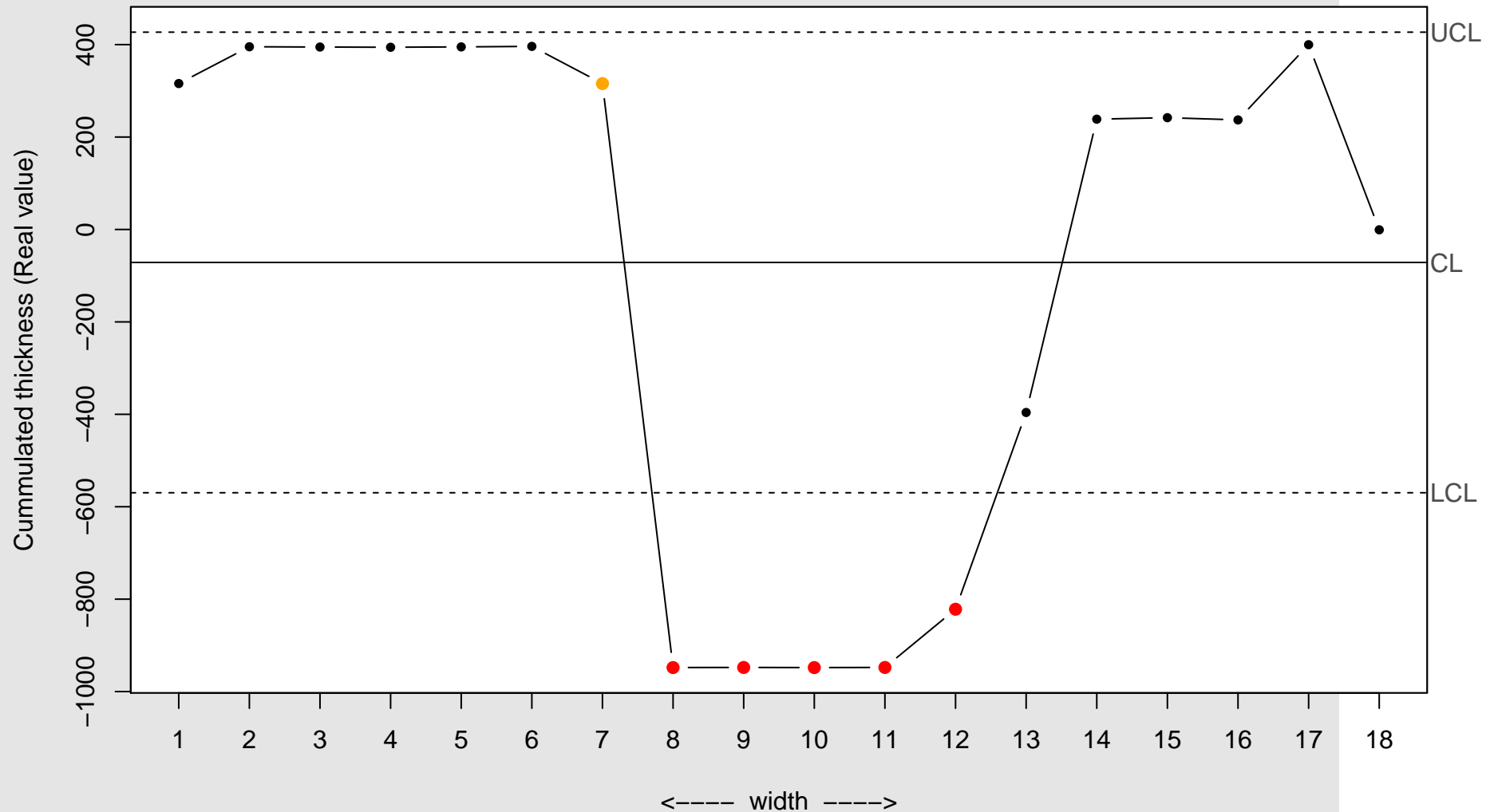
LCL = -996.7146

UCL = 996.7146

Number beyond limits = 0

Number violating runs = 1

Simulated thickness: Cpk is  $-0.02221$  and  $z$  is  $-1.567$ .

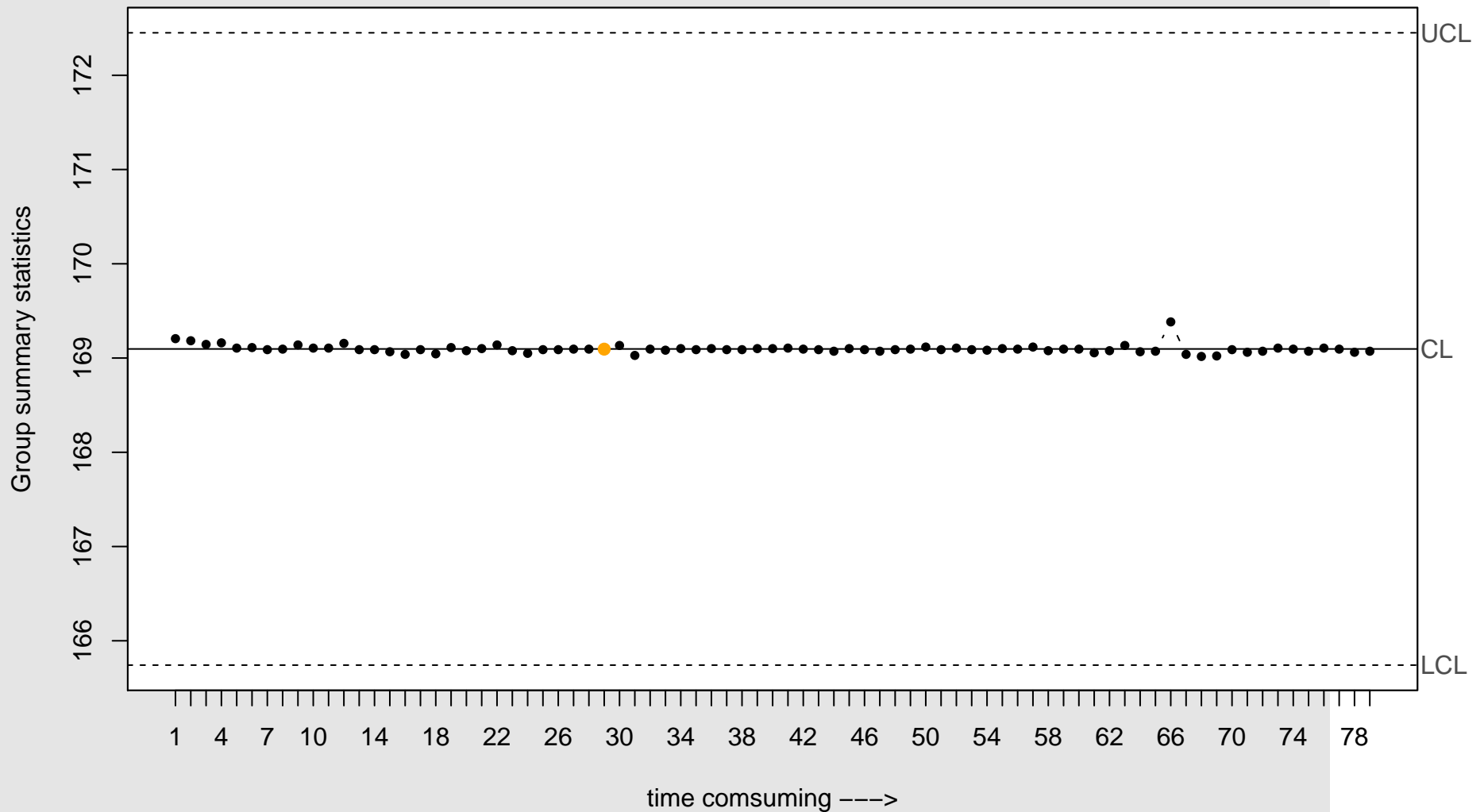


Number of groups = 18  
Center =  $-71.4$   
StdDev =  $166.1191$

LCL =  $-569.7573$   
UCL =  $426.9573$

Number beyond limits = 5  
Number violating runs = 1

X-bar chart for a given dataset



Number of groups = 79

Center = 169.0962

StdDev = 4.743706

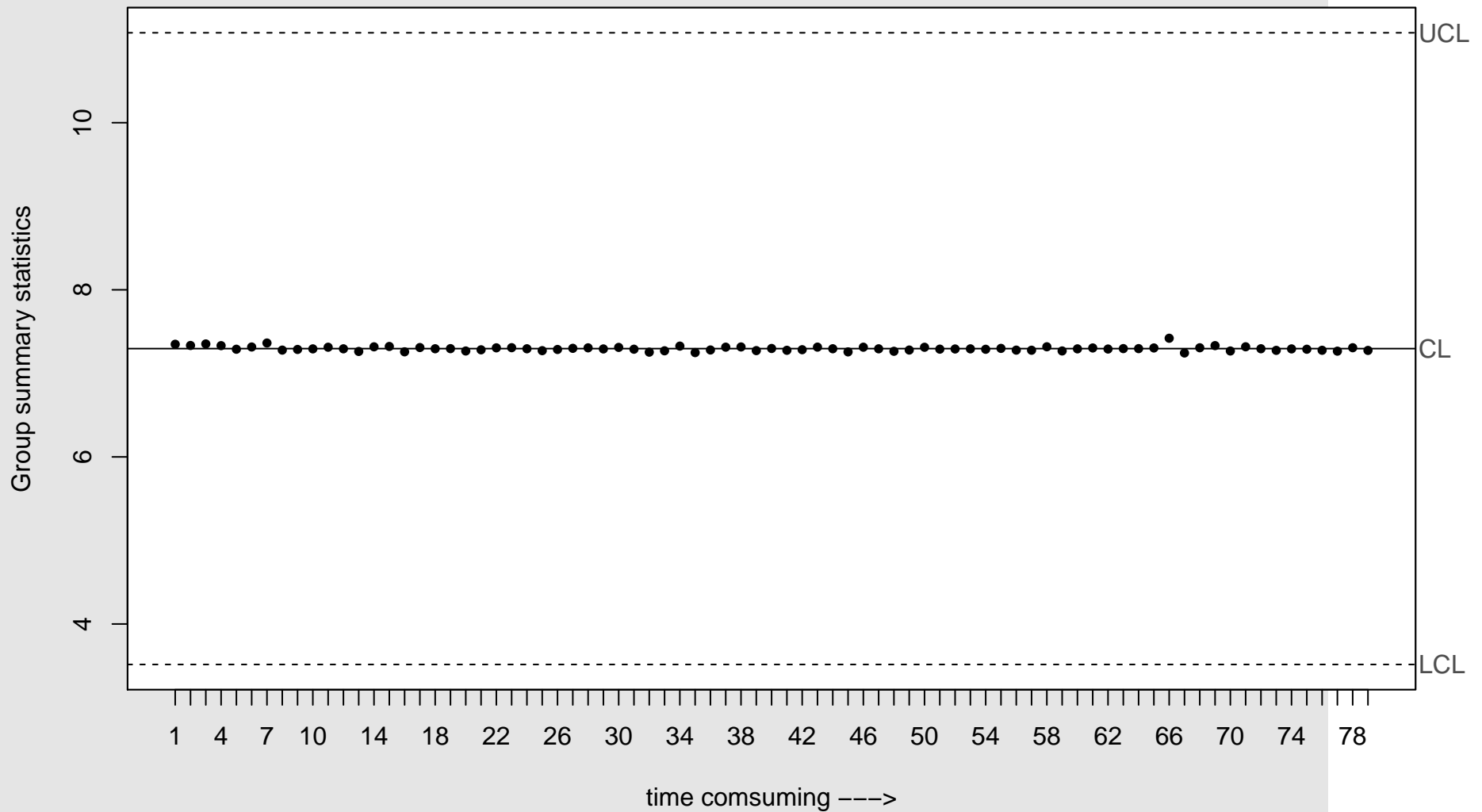
LCL = 165.7419

UCL = 172.4505

Number beyond limits = 0

Number violating runs = 1

S chart for a given dataset

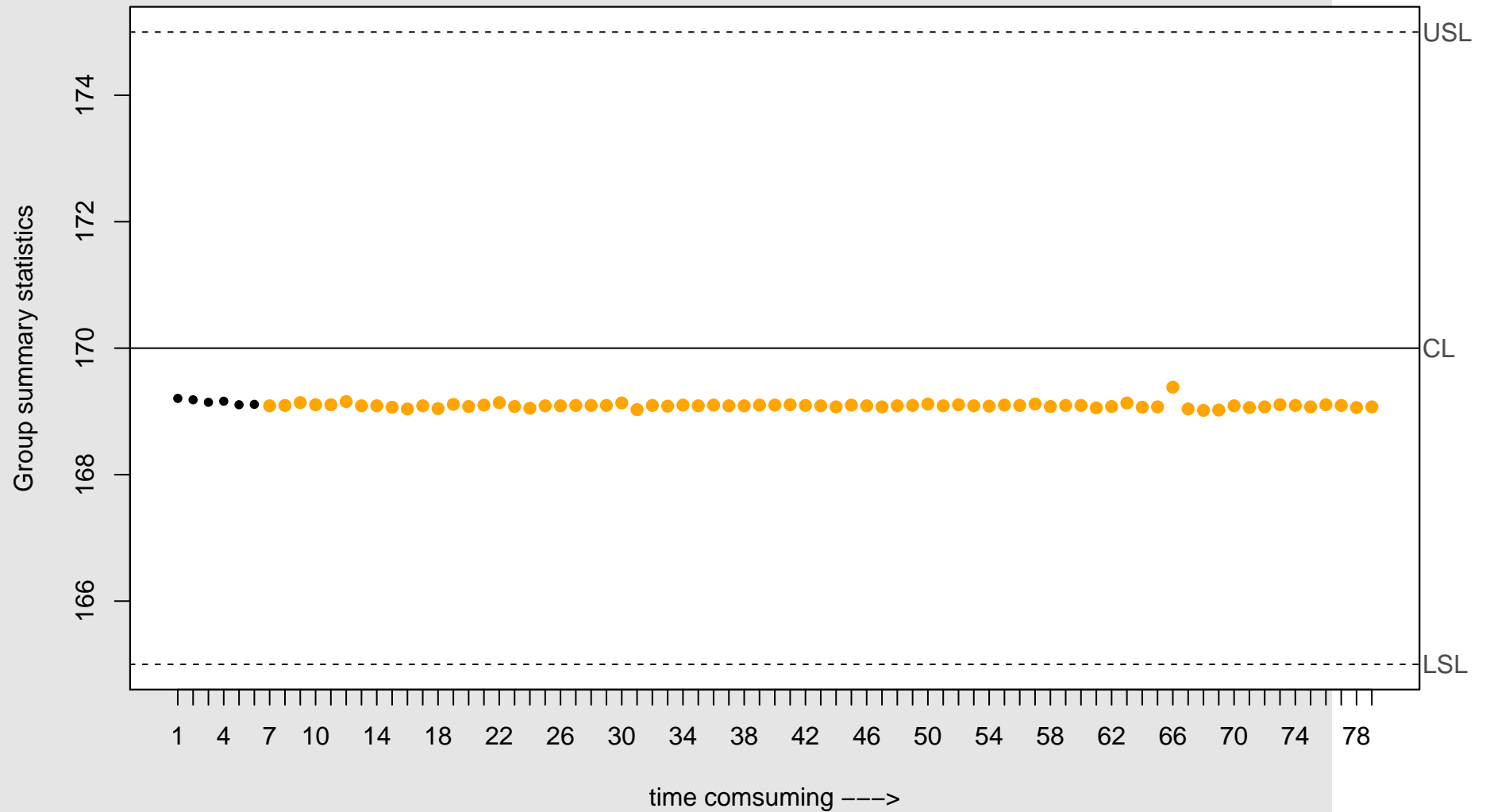


Number of groups = 79  
Center = 7.296072  
StdDev = 7.404097

LCL = 3.515605  
UCL = 11.07654

Number beyond limits = 0  
Number violating runs = 0

X-bar chart using USL/LSL for a given dataset



Number of groups = 79

Center = 170

StdDev = 4.743706

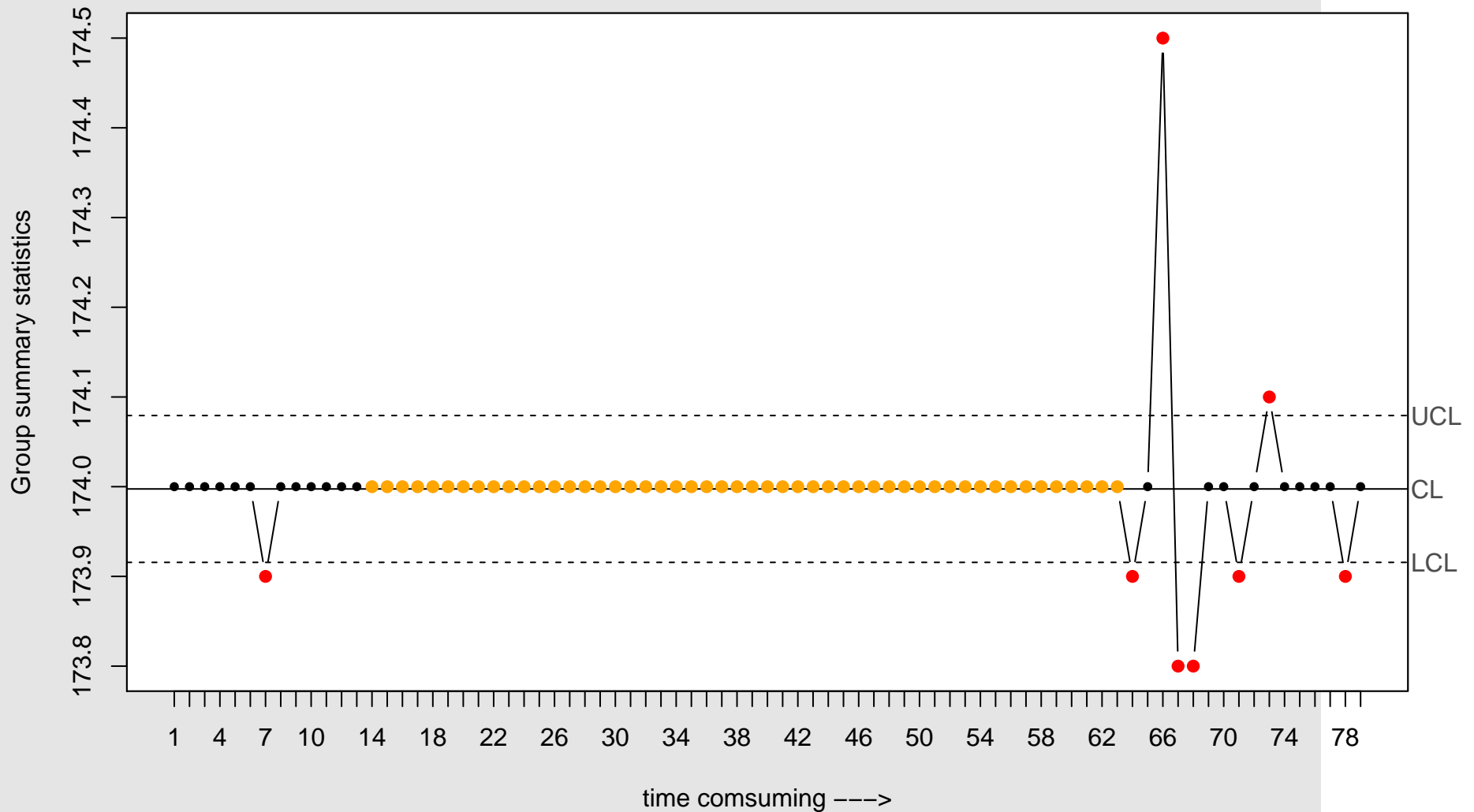
LCL = 165

UCL = 175

Number beyond limits = 0

Number violating runs = 73

# 1th column point of this product



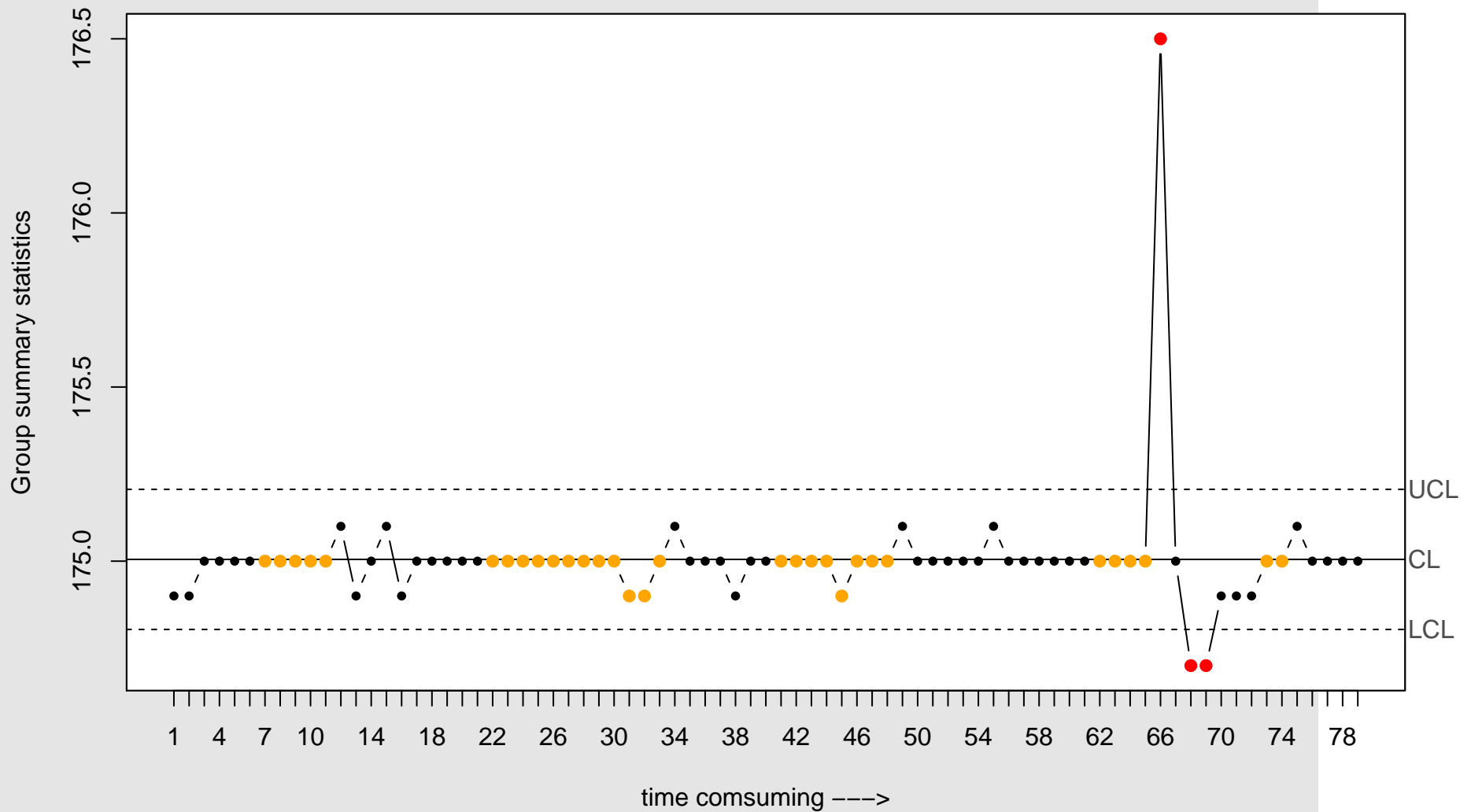
Number of groups = 79  
Center = 173.9975  
StdDev = 0.02727769

LCL = 173.9156  
UCL = 174.0793

Number beyond limits = 8  
Number violating runs = 50



## 2th column point of this product



Number of groups = 79

Center = 175.0051

StdDev = 0.06705765

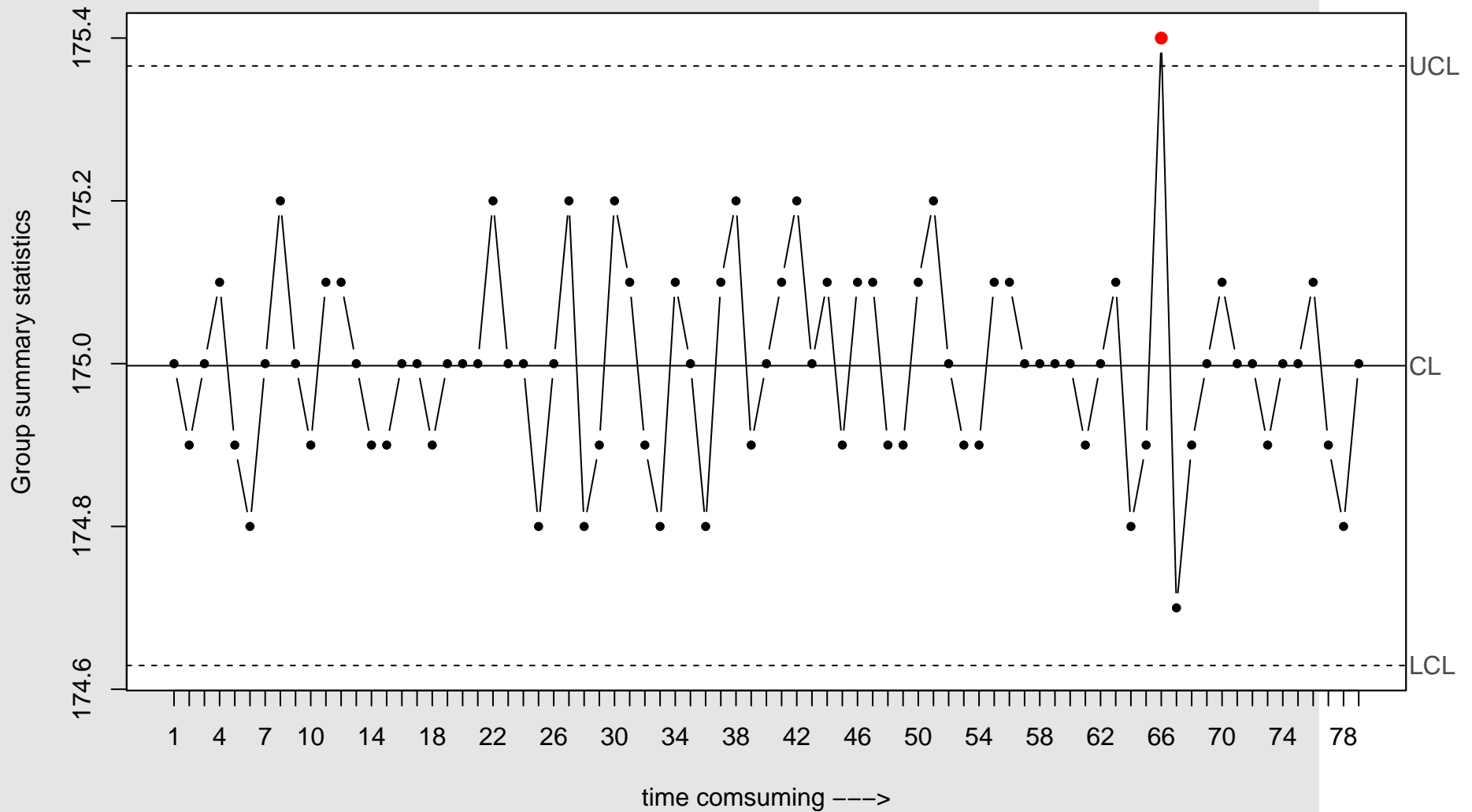
LCL = 174.8039

UCL = 175.2062

Number beyond limits = 3

Number violating runs = 31

### 3th column point of this product



Number of groups = 79

Center = 174.9975

StdDev = 0.1227496

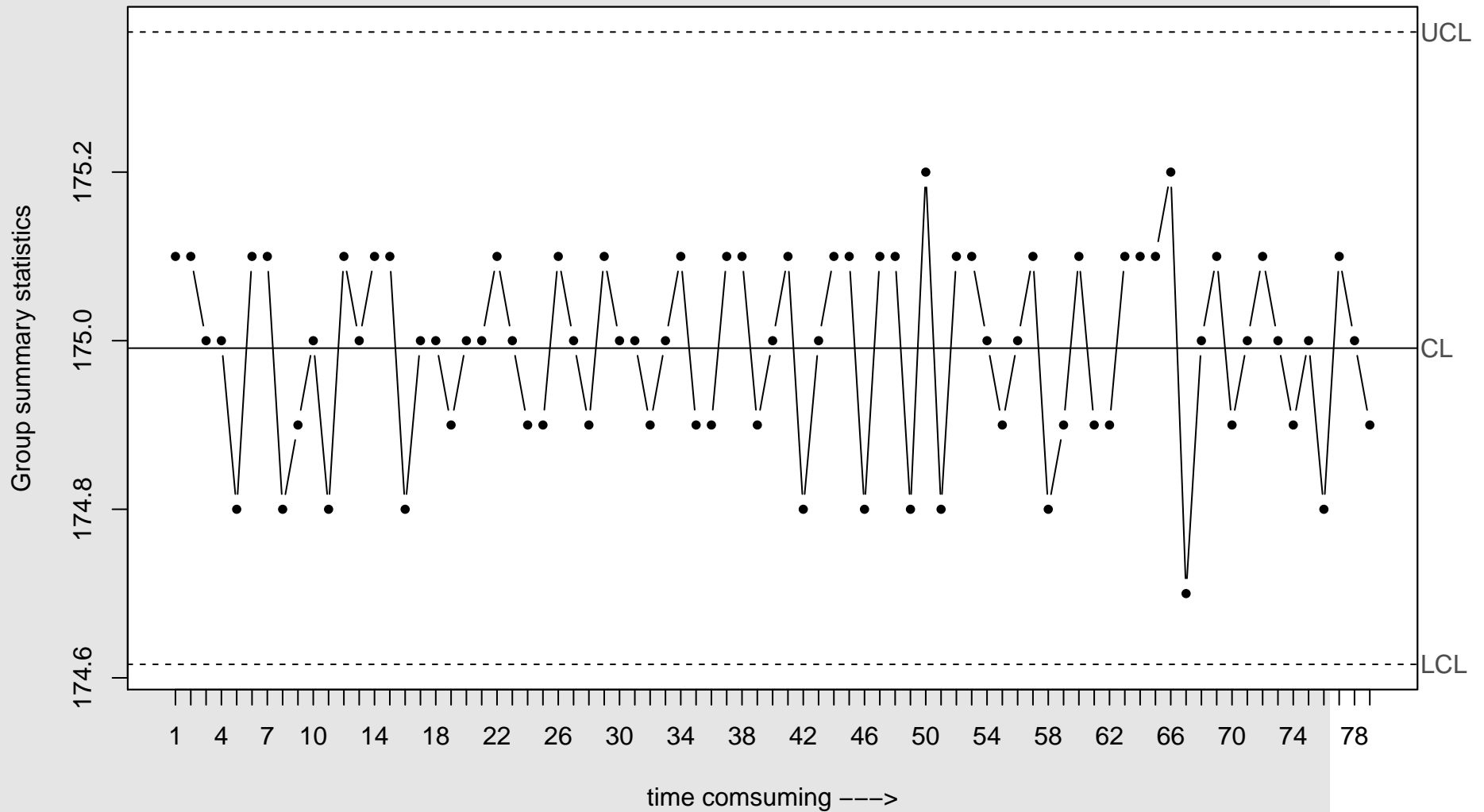
LCL = 174.6292

UCL = 175.3657

Number beyond limits = 1

Number violating runs = 0

### 4th column point of this product



Number of groups = 79

Center = 174.9911

StdDev = 0.1250227

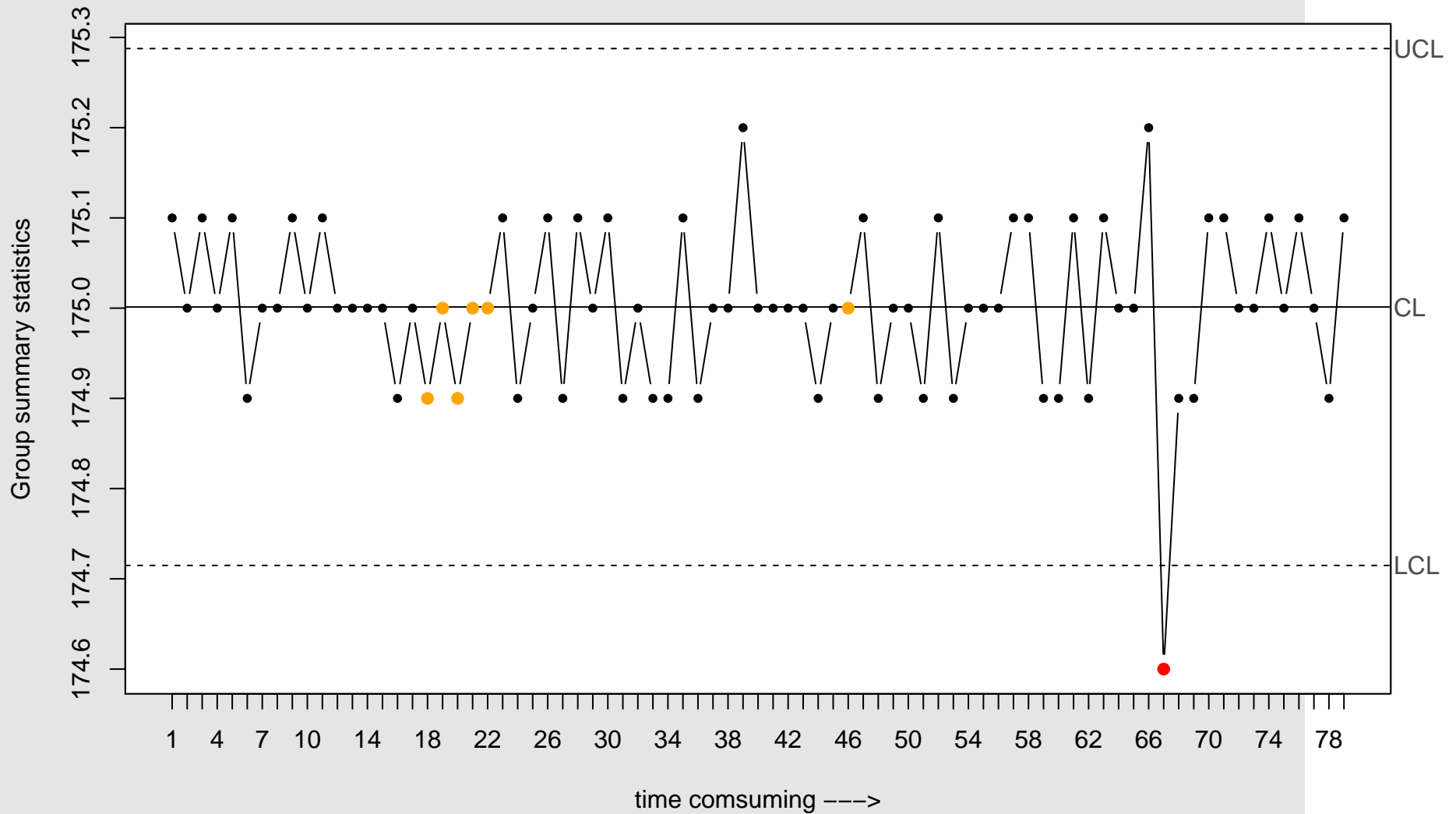
LCL = 174.6161

UCL = 175.3662

Number beyond limits = 0

Number violating runs = 0

### 5th column point of this product



Number of groups = 79

Center = 175.0013

StdDev = 0.0954719

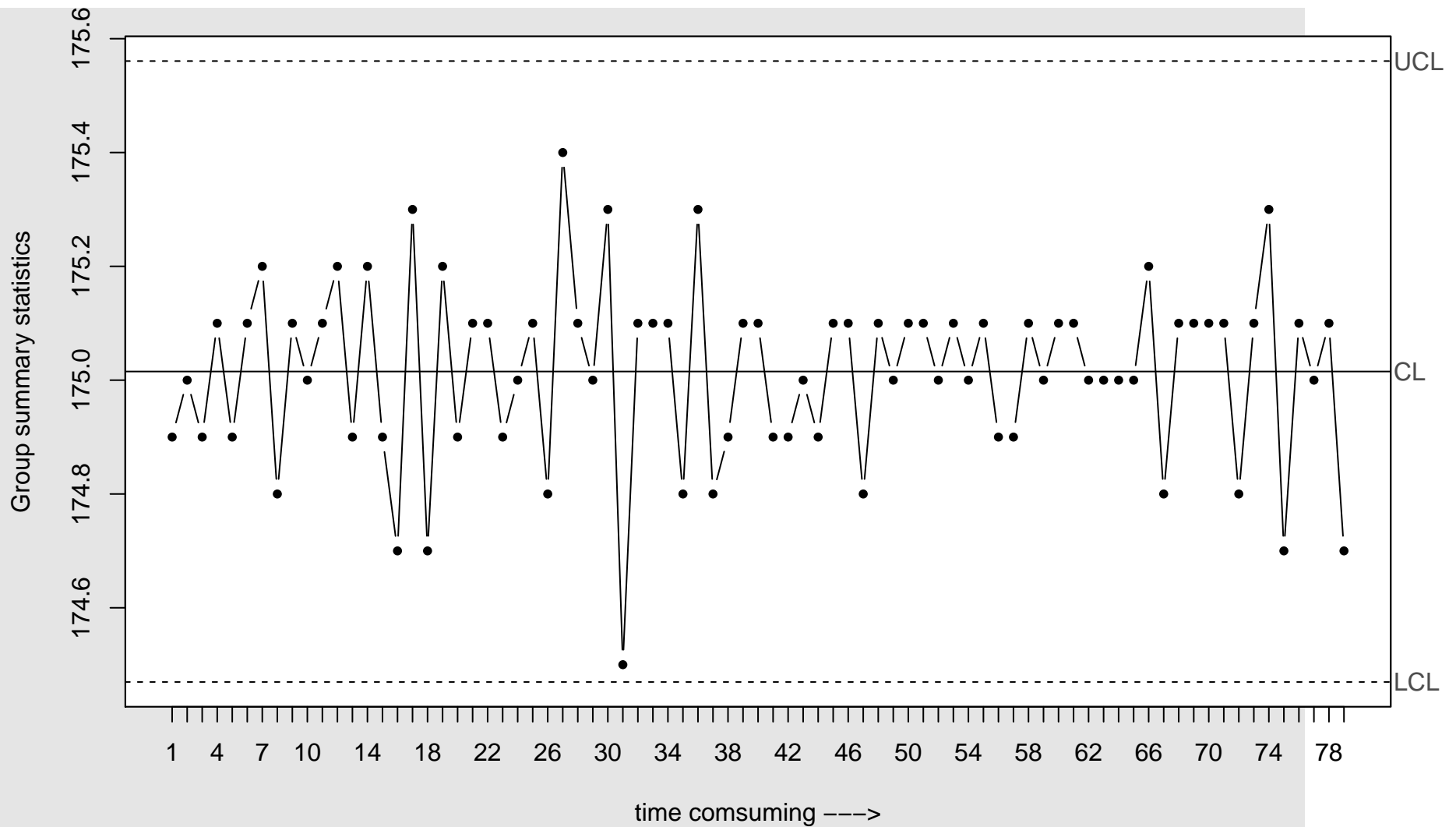
LCL = 174.7149

UCL = 175.2877

Number beyond limits = 1

Number violating runs = 6

### 6th column point of this product



Number of groups = 79

Center = 175.0152

StdDev = 0.1818512

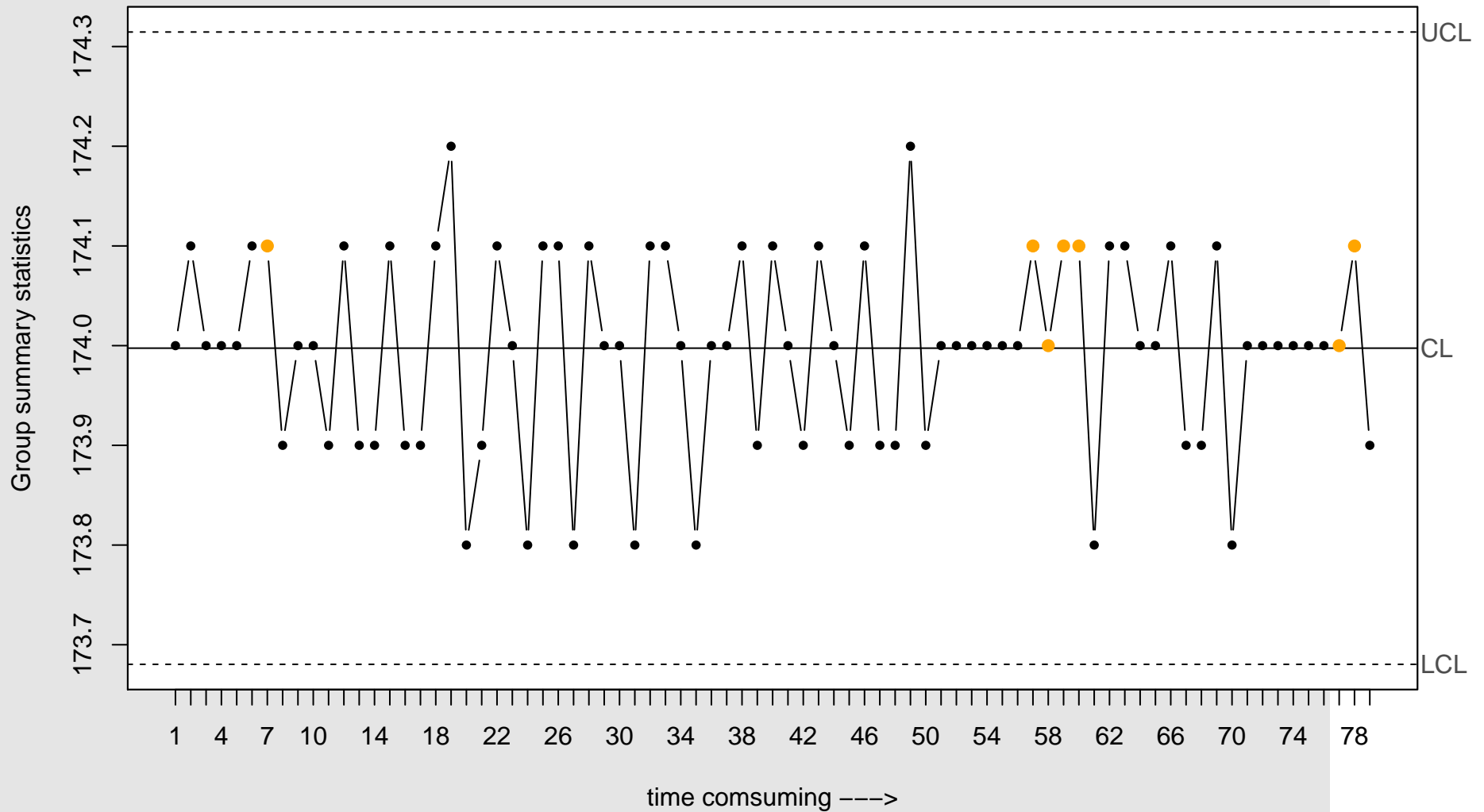
LCL = 174.4696

UCL = 175.5607

Number beyond limits = 0

Number violating runs = 0

# 7th column point of this product

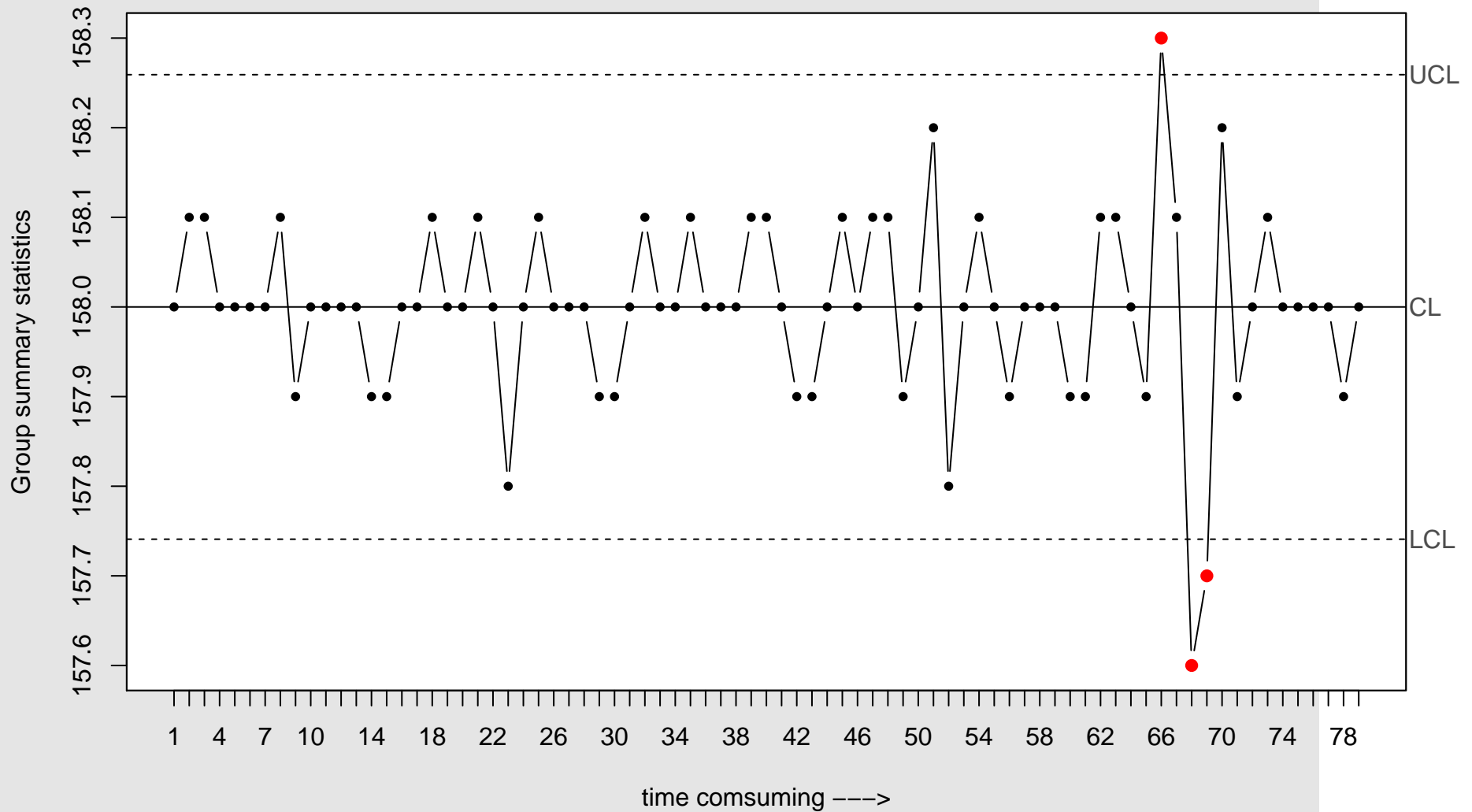


Number of groups = 79  
 Center = 173.9975  
 StdDev = 0.105701

LCL = 173.6804  
 UCL = 174.3146

Number beyond limits = 0  
 Number violating runs = 7

# 8th column point of this product



Number of groups = 79

Center = 158

StdDev = 0.08637934

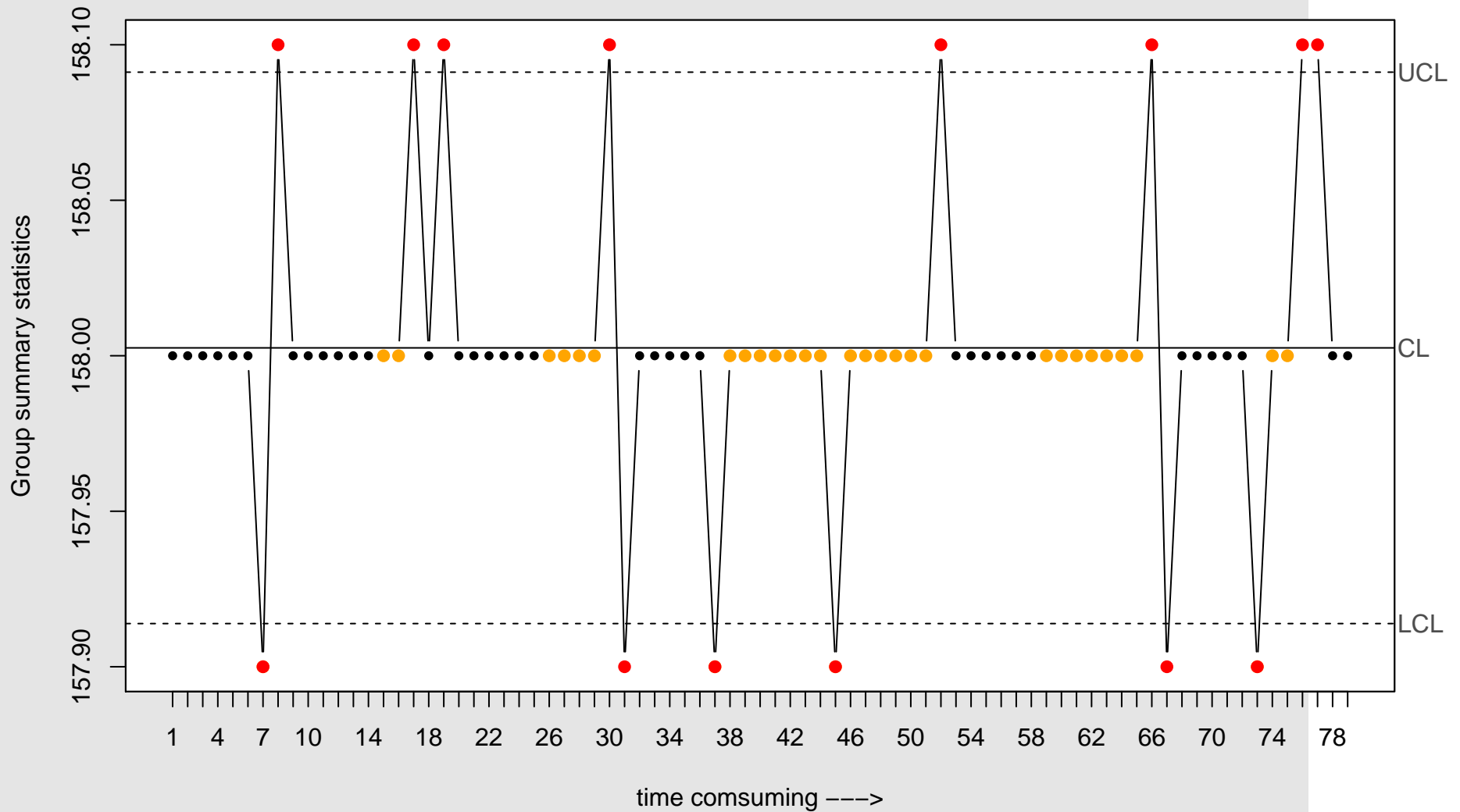
LCL = 157.7409

UCL = 158.2591

Number beyond limits = 3

Number violating runs = 0

### 9th column point of this product



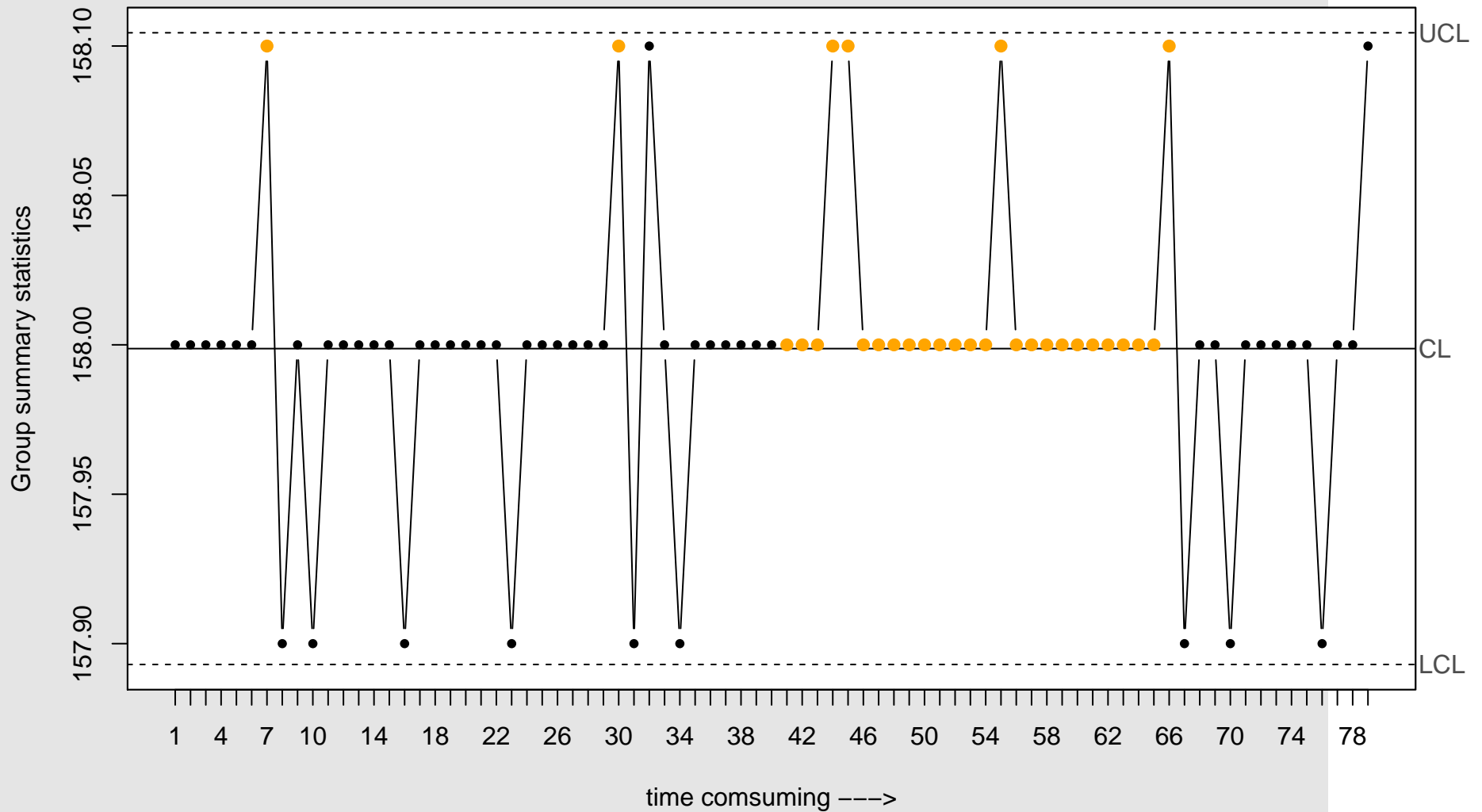
Number of groups = 79  
Center = 158.0025  
StdDev = 0.02955083

LCL = 157.9139  
UCL = 158.0912

Number beyond limits = 14  
Number violating runs = 32



# 10th column point of this product

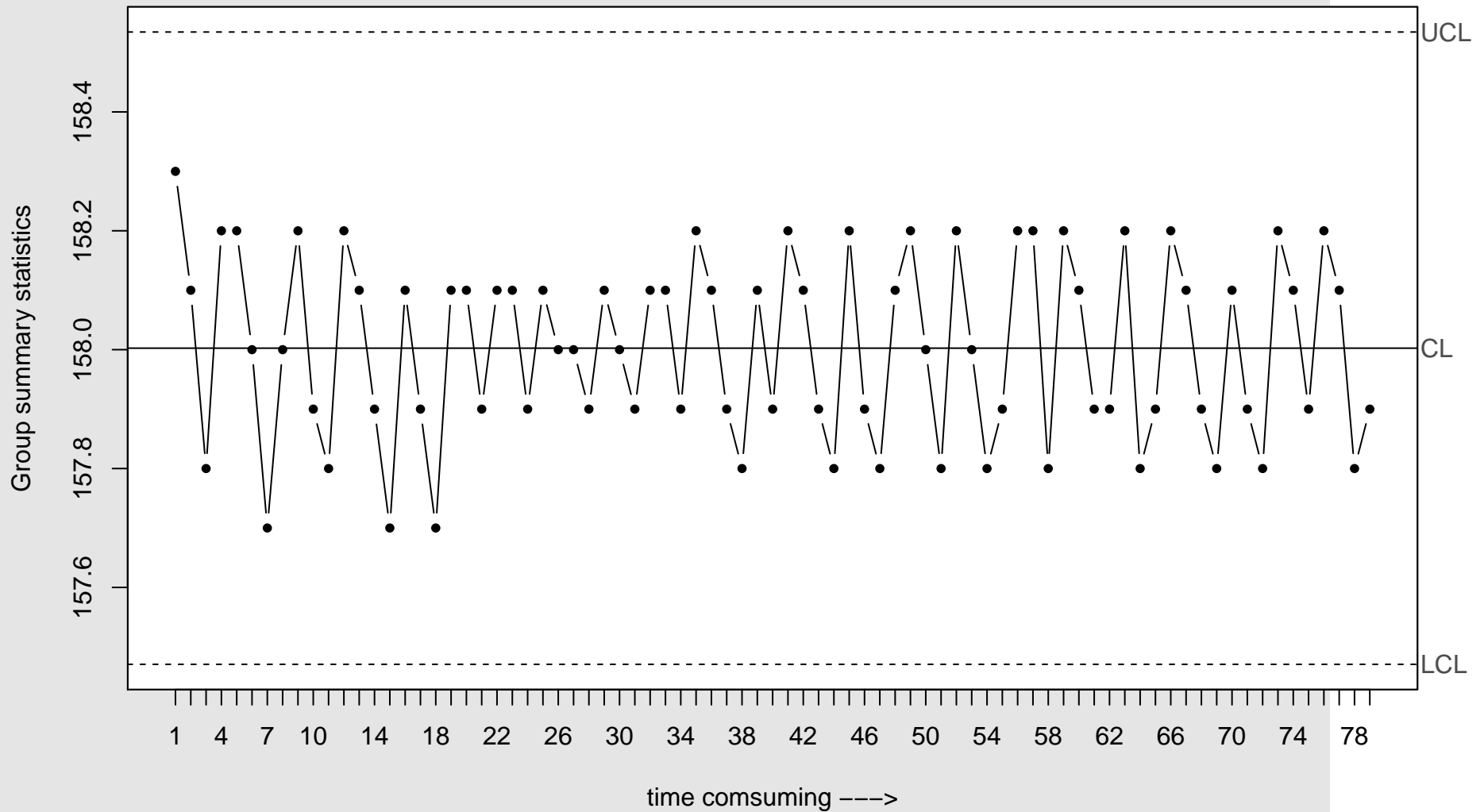


Number of groups = 79  
Center = 157.9987  
StdDev = 0.03523368

LCL = 157.893  
UCL = 158.1044

Number beyond limits = 0  
Number violating runs = 28

### 11th column point of this product



Number of groups = 79

Center = 158.0025

StdDev = 0.177305

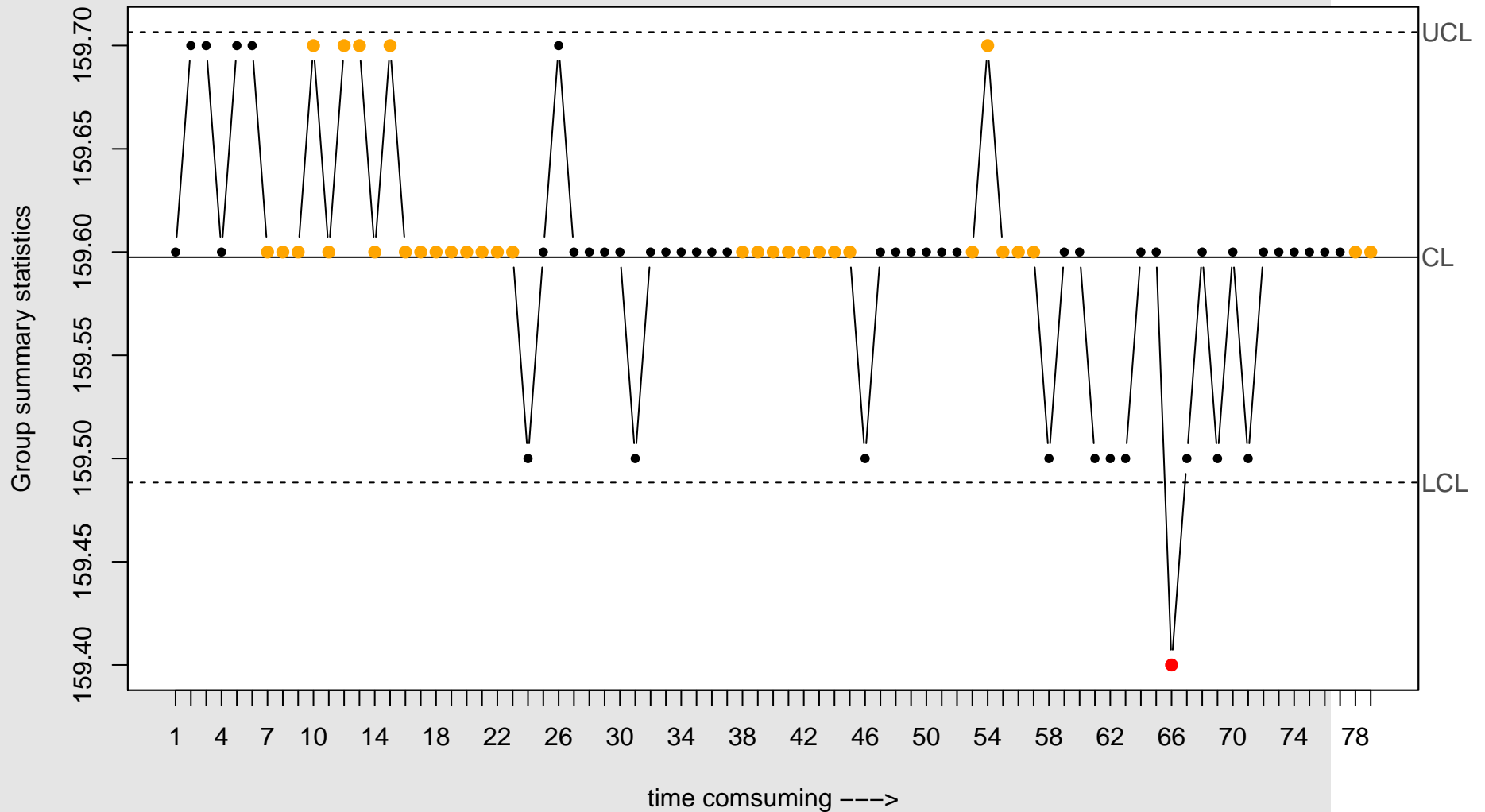
LCL = 157.4706

UCL = 158.5344

Number beyond limits = 0

Number violating runs = 0

# 12th column point of this product

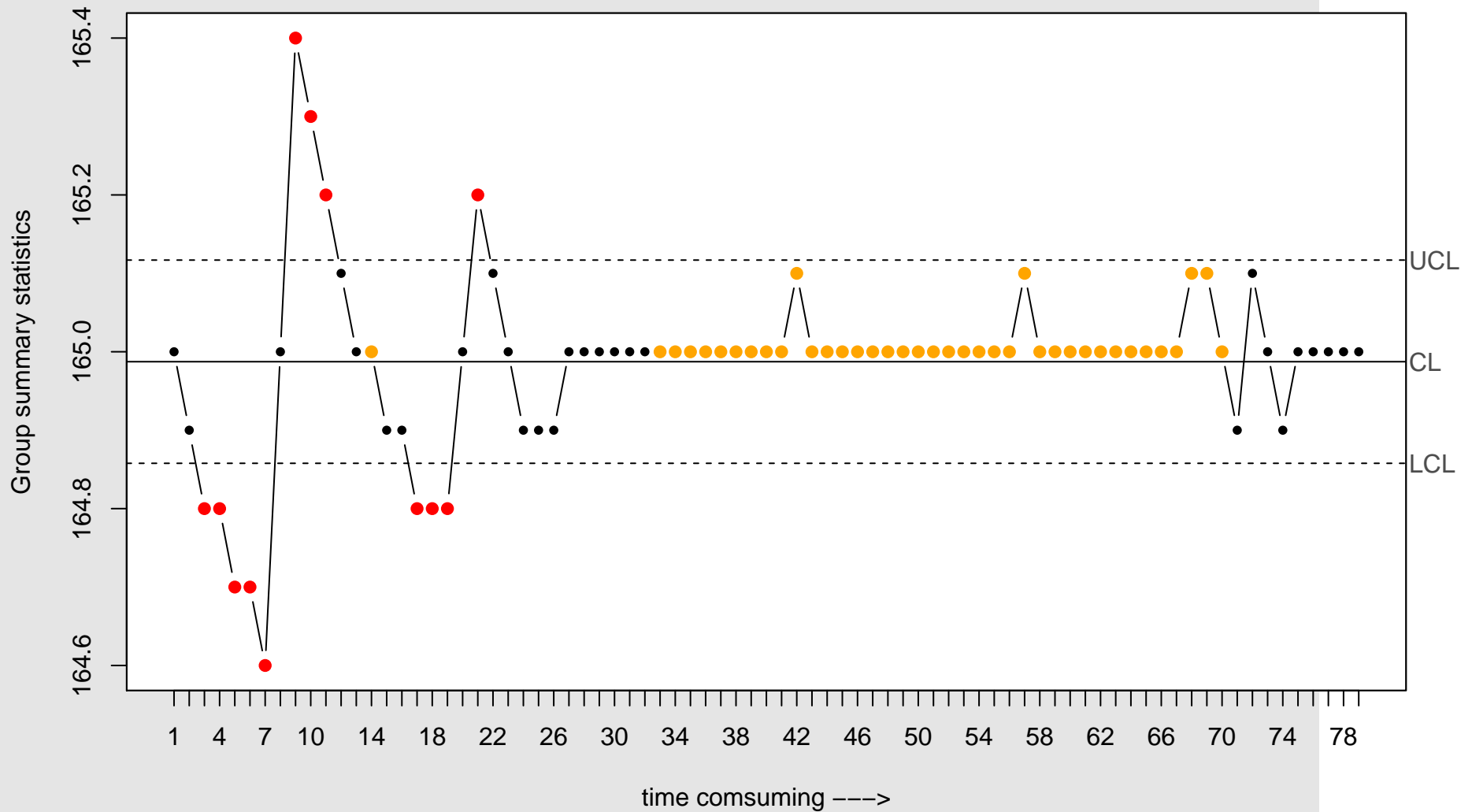


Number of groups = 79  
 Center = 159.5975  
 StdDev = 0.03637025

LCL = 159.4884  
 UCL = 159.7066

Number beyond limits = 1  
 Number violating runs = 32

# 13th column point of this product

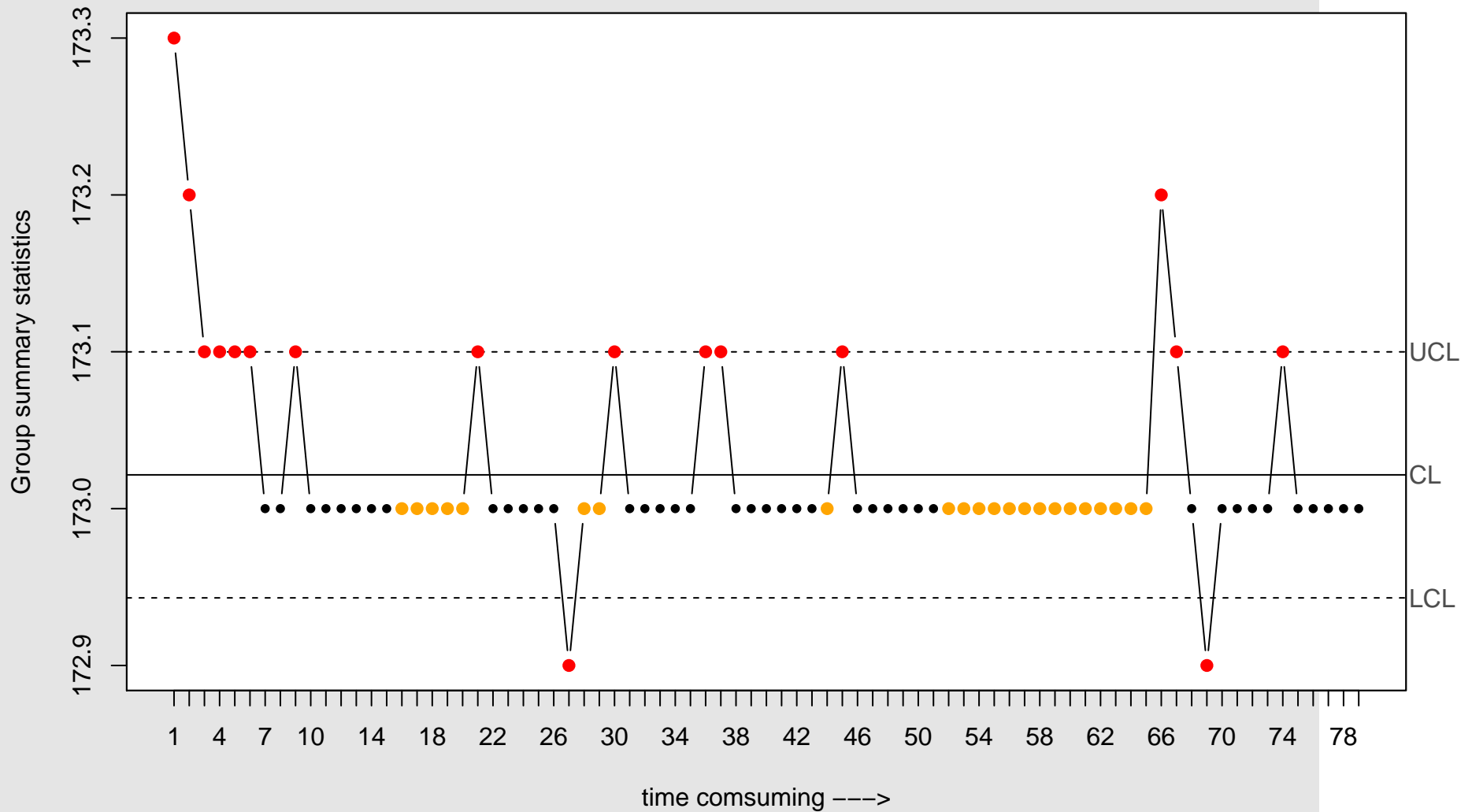


Number of groups = 79  
 Center = 164.9873  
 StdDev = 0.04318967

LCL = 164.8578  
 UCL = 165.1169

Number beyond limits = 12  
 Number violating runs = 39

# 14th column point of this product

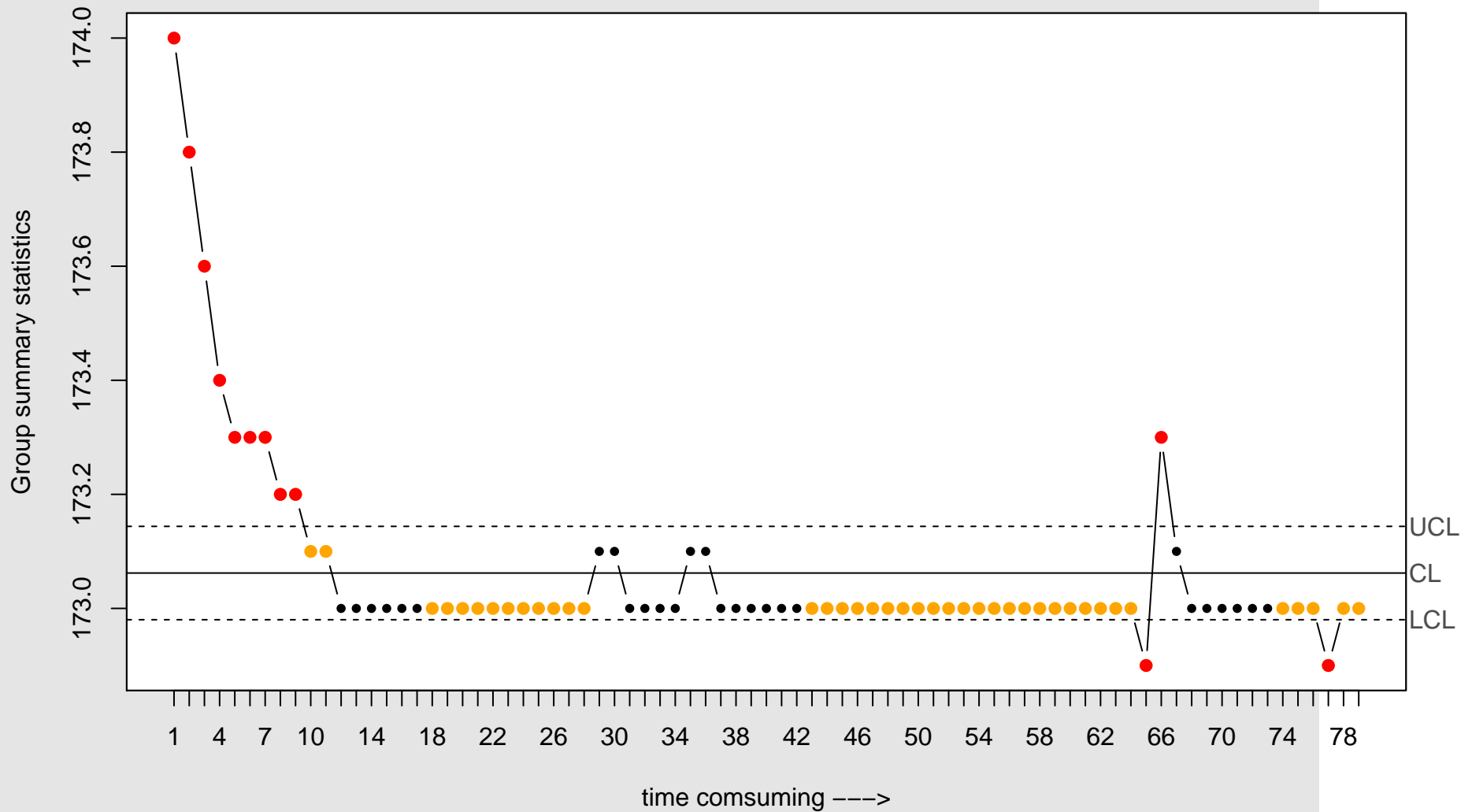


Number of groups = 79  
 Center = 173.0215  
 StdDev = 0.02614112

LCL = 172.9431  
 UCL = 173.0999

Number beyond limits = 17  
 Number violating runs = 22

### 15th column point of this product

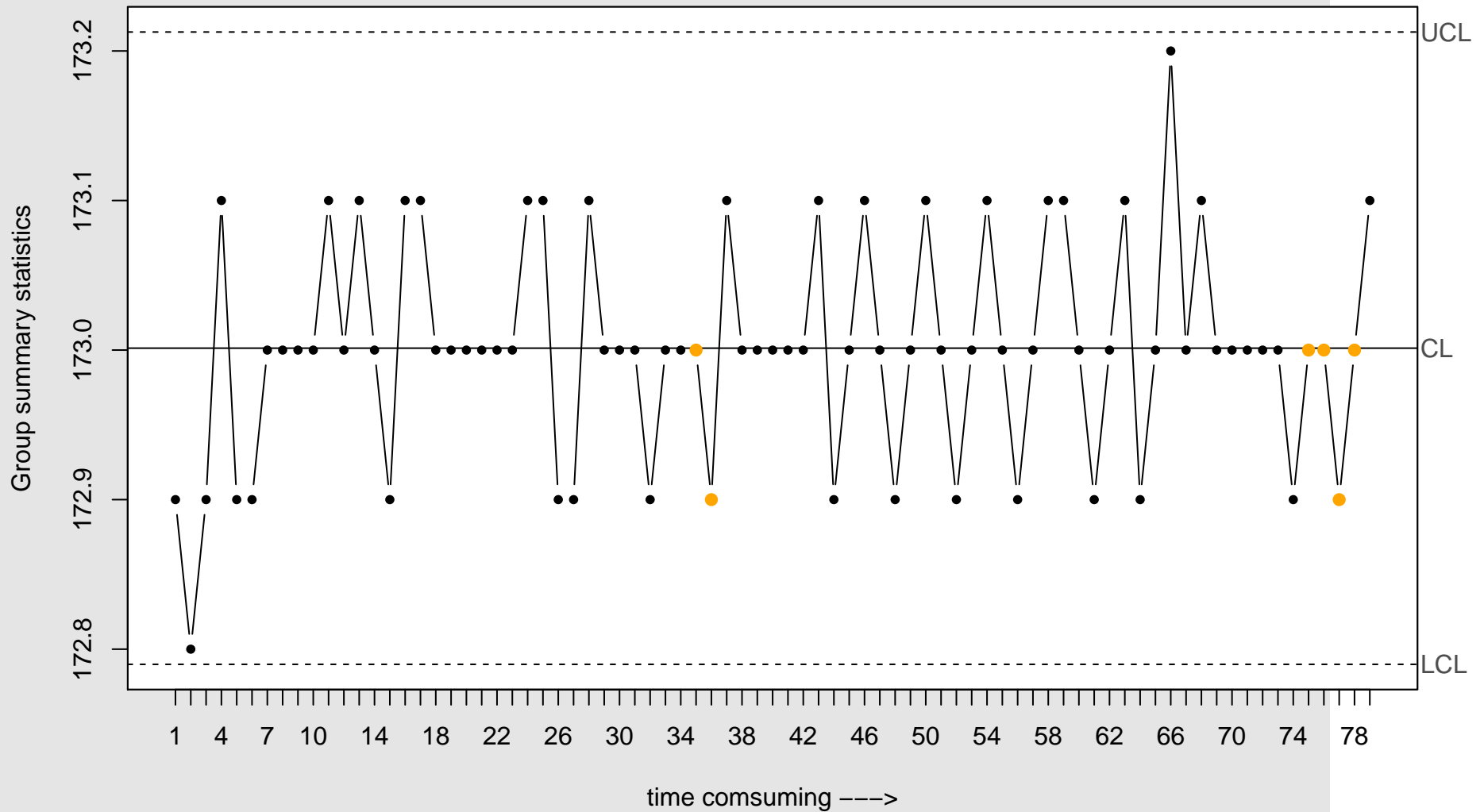


Number of groups = 79  
Center = 173.062  
StdDev = 0.02727769

LCL = 172.9802  
UCL = 173.1439

Number beyond limits = 12  
Number violating runs = 45

### 16th column point of this product

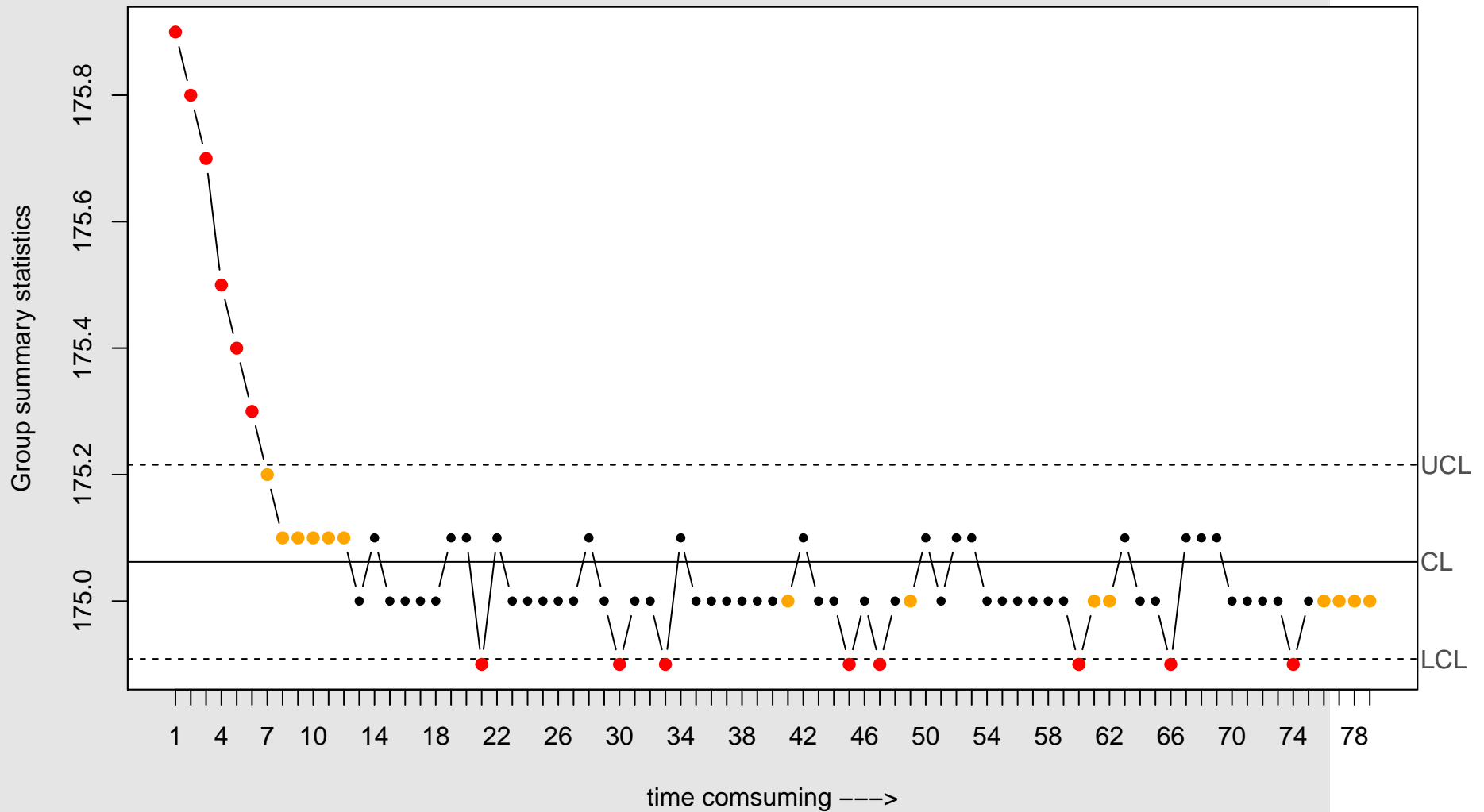


Number of groups = 79  
Center = 173.0013  
StdDev = 0.07046736

LCL = 172.7899  
UCL = 173.2127

Number beyond limits = 0  
Number violating runs = 6

# 17th column point of this product



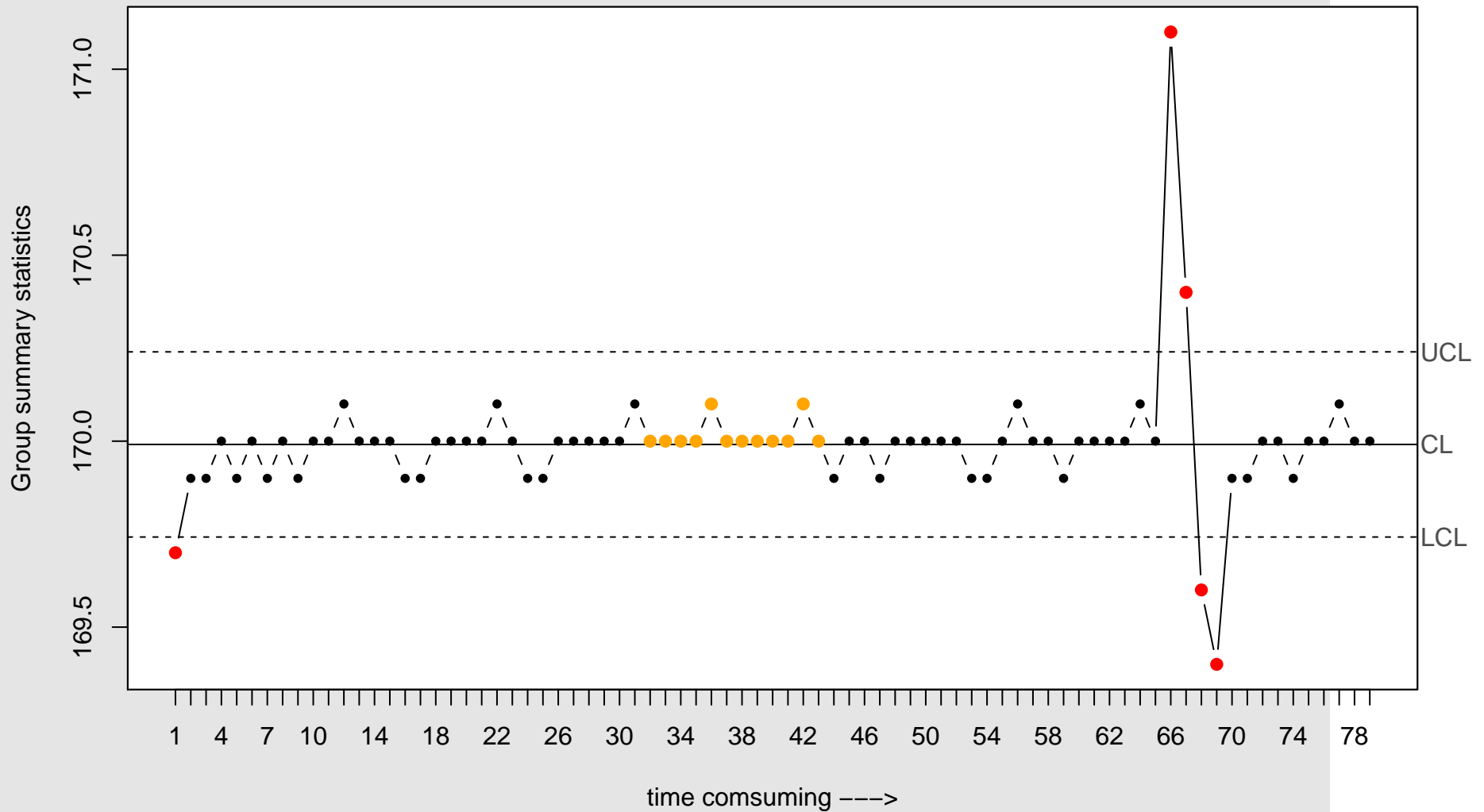
Number of groups = 79  
 Center = 175.062  
 StdDev = 0.05114566

LCL = 174.9086  
 UCL = 175.2155

Number beyond limits = 14  
 Number violating runs = 15



### 18th column point of this product



Number of groups = 79  
Center = 169.9911  
StdDev = 0.08296963

LCL = 169.7422  
UCL = 170.24

Number beyond limits = 5  
Number violating runs = 14