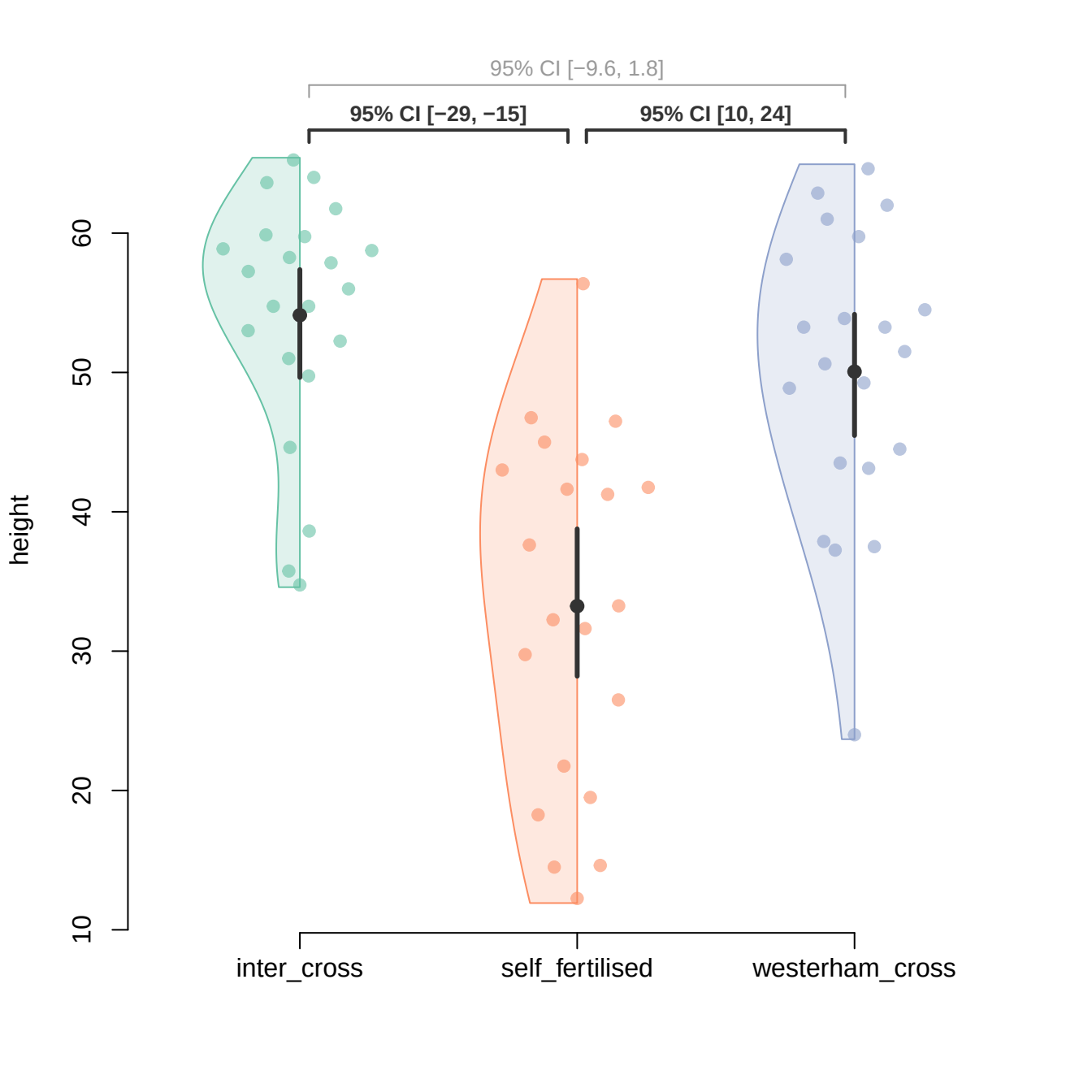
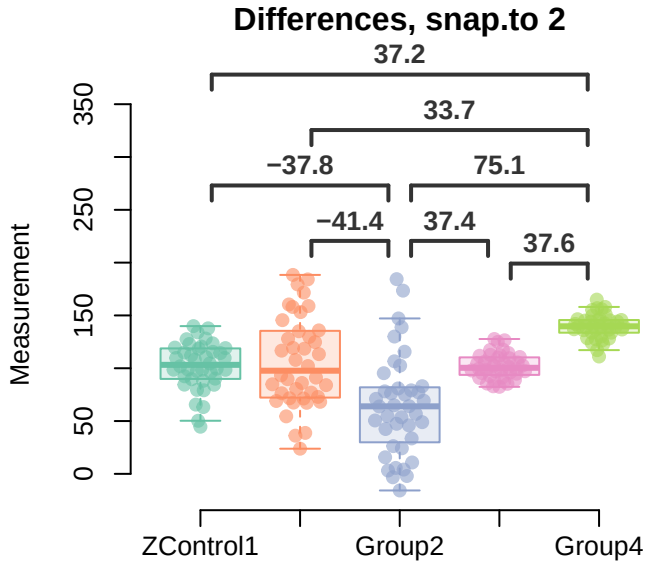
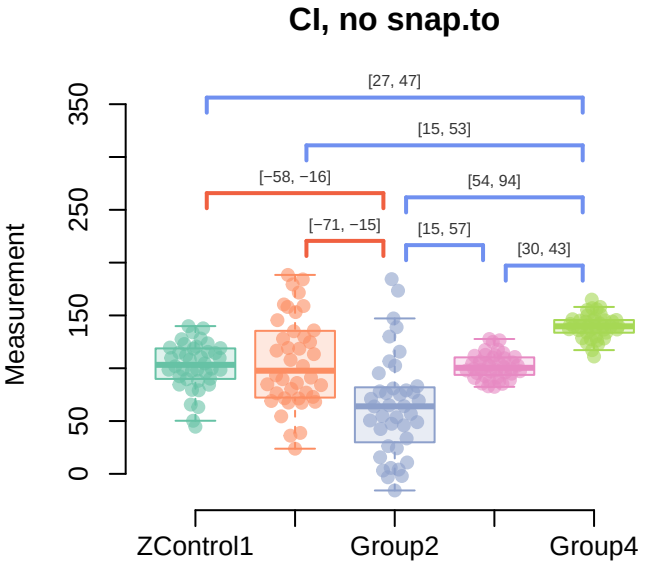
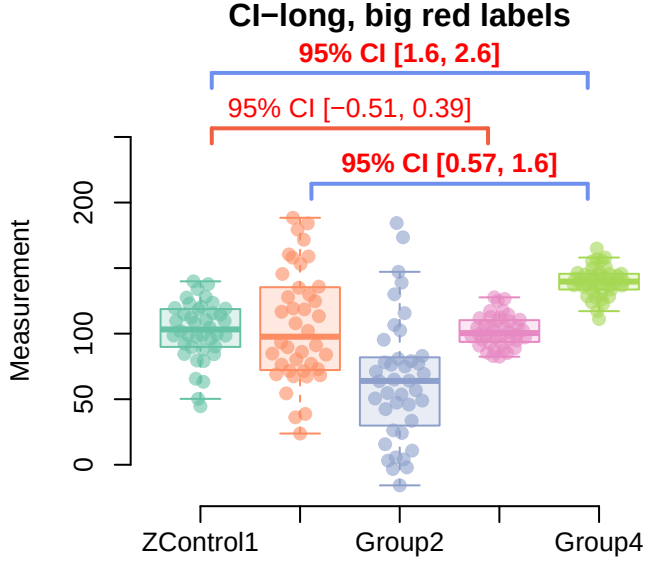
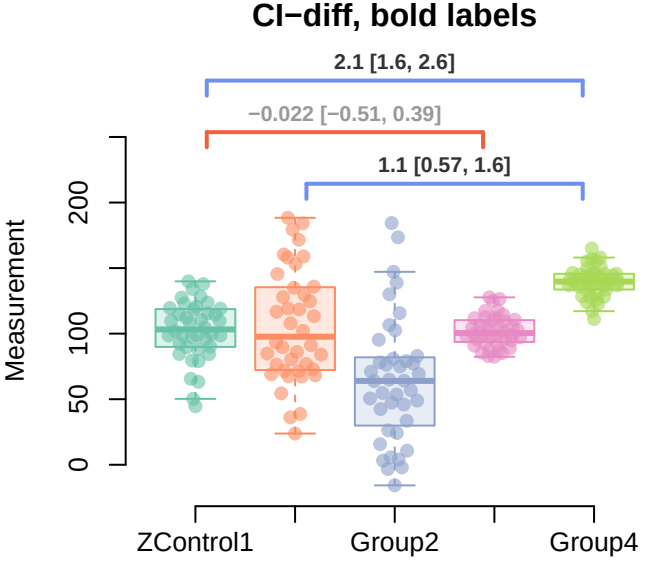
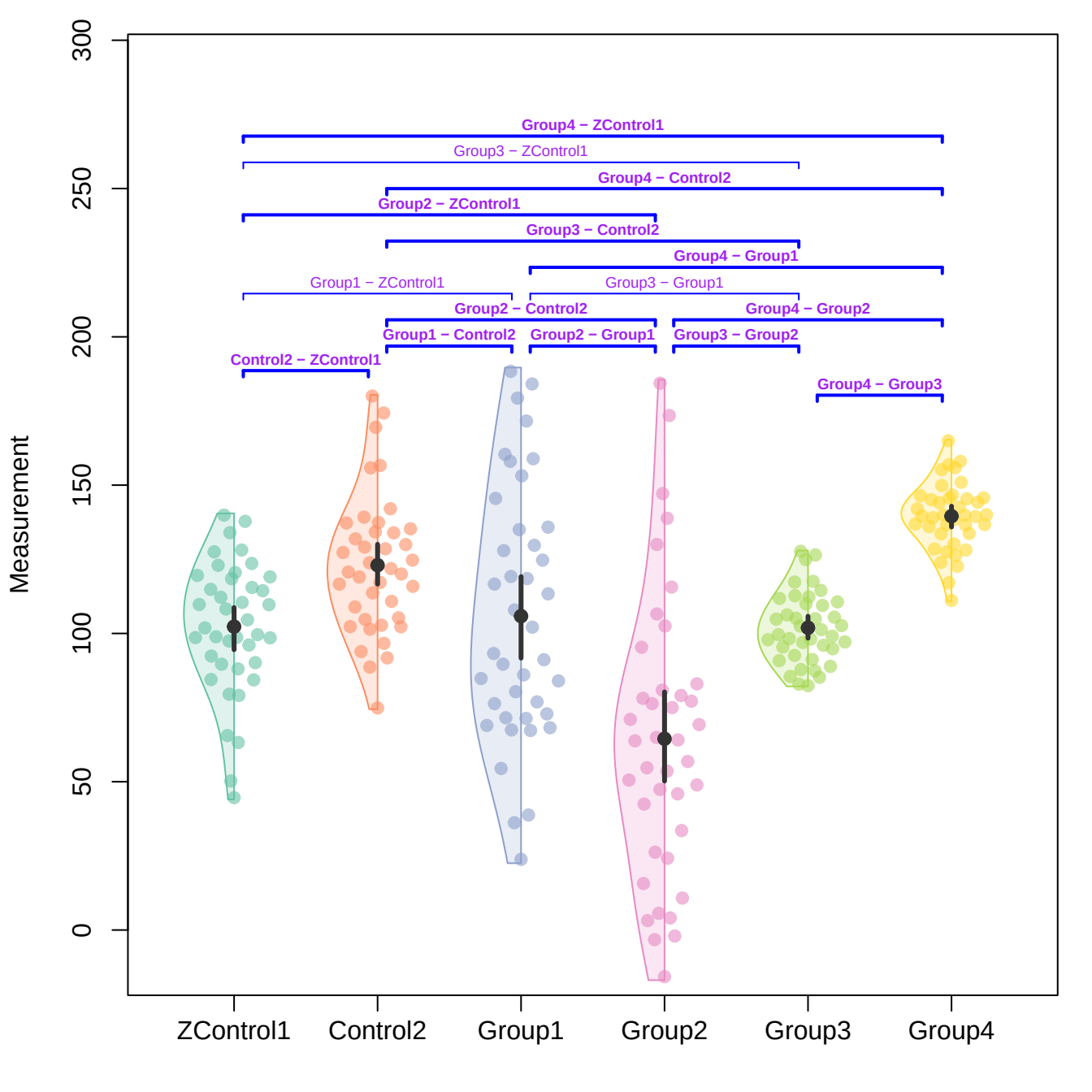

95% CI [−9.6, 1.8]
95% CI [−29, −15]
95% CI [10, 24]
height
60
50
40
30
20
10
inter_cross
self_fertilised
westerham_cross

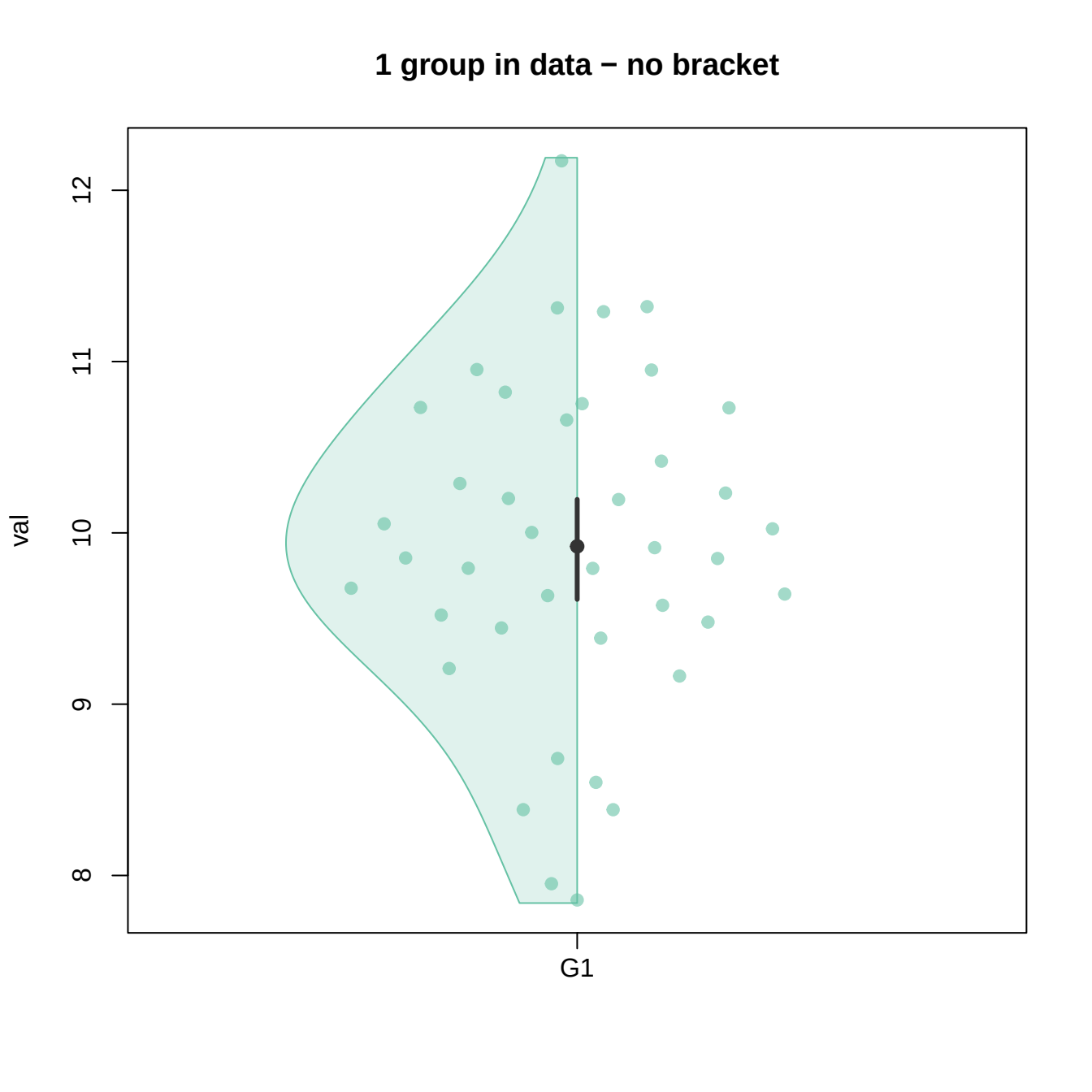

Differences, snap.to 2
37.2
33.7
−37.8
75.1
−41.4
37.4
37.6
Measurement
0
50
150
250
350
ZControl1
Group2
Group4

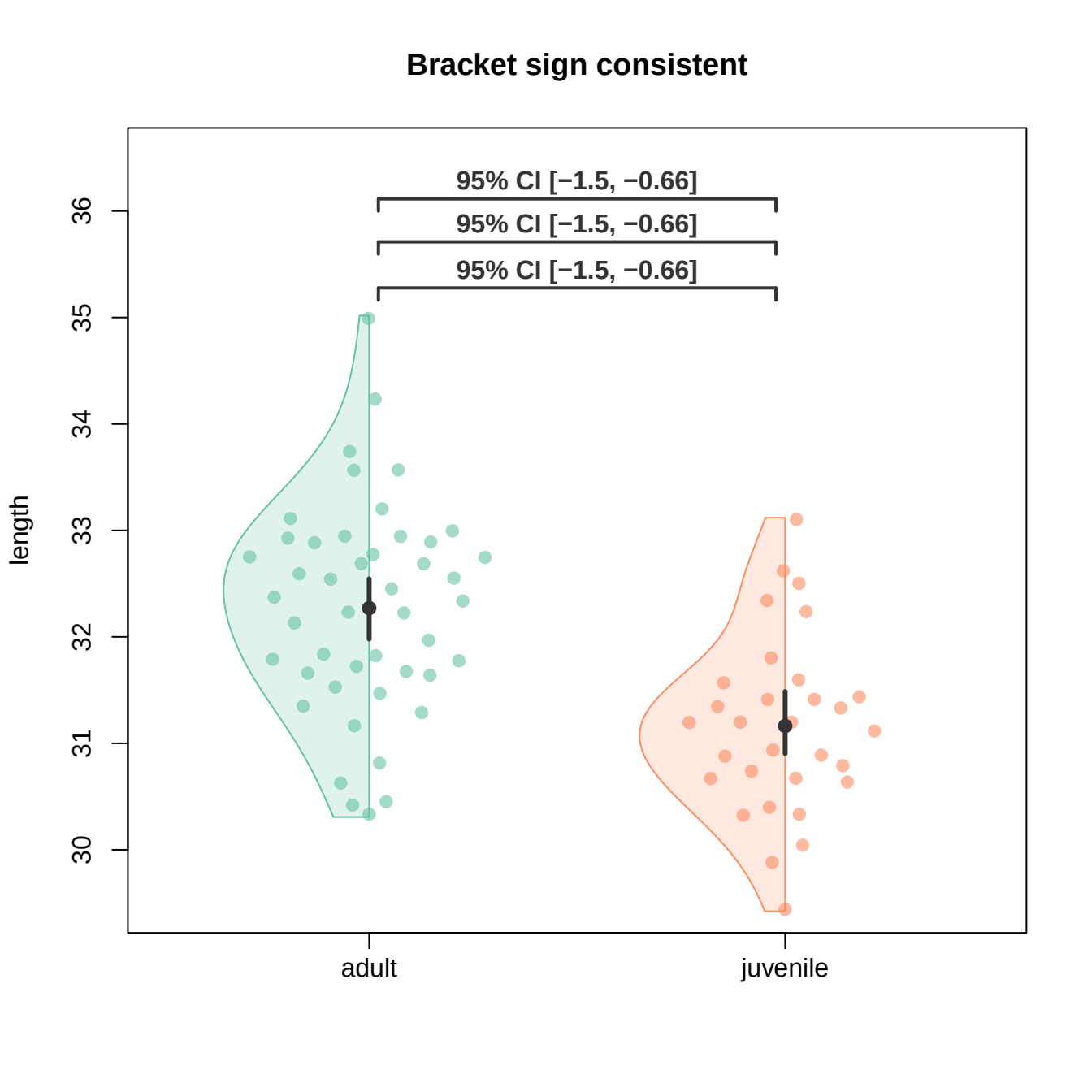

CI, no snap.to
[27, 47]
[15, 53]
[−58, −16]
[54, 94]
[−71, −15]
[15, 57]
[30, 43]
Measurement
0
50
150
250
350
ZControl1
Group2
Group4

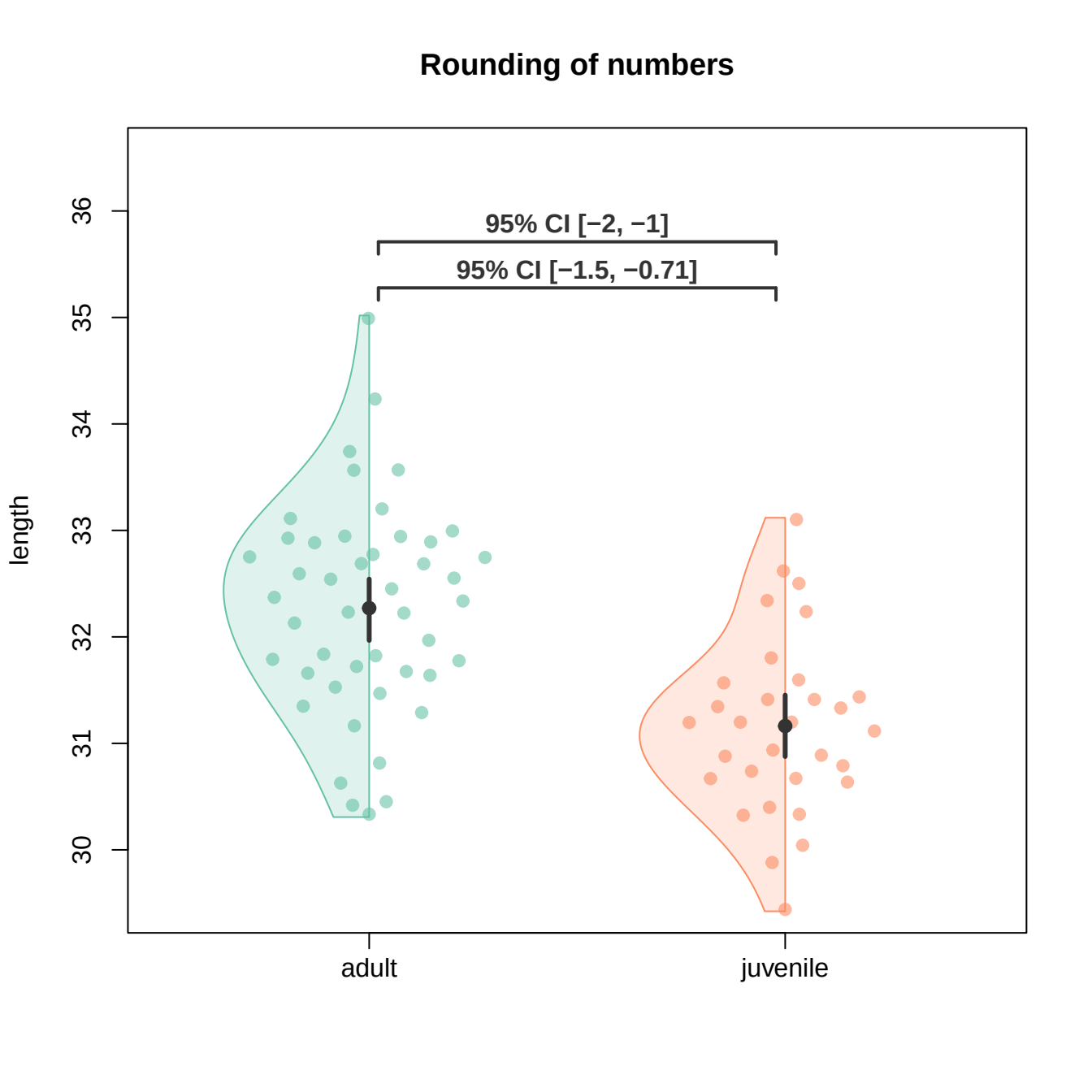

CI−long, big red labels
95% CI [1.6, 2.6]
95% CI [−0.51, 0.39]
95% CI [0.57, 1.6]
Measurement
0
50
100
200
ZControl1
Group2
Group4

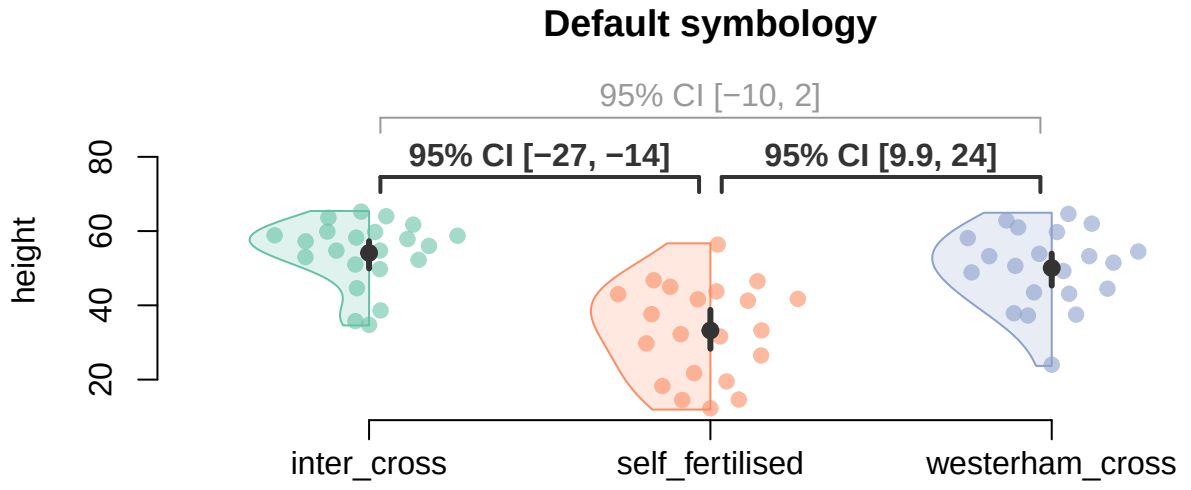

CI−diff, bold labels
2.1 [1.6, 2.6]
−0.022 [−0.51, 0.39]
1.1 [0.57, 1.6]
Measurement
0
50
100
200
ZControl1
Group2
Group4

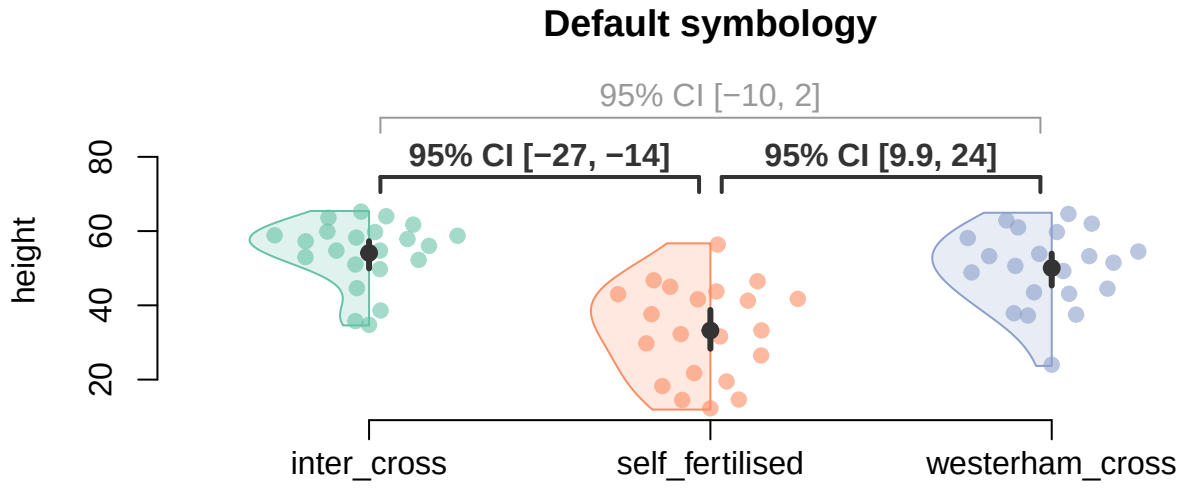

Measurement
300
250
200
150
100
50
0
Group4 − ZControl1
Group3 − ZControl1
Group4 − Control2
Group2 − ZControl1
Group3 − Control2
Group4 − Group1
Group1 − ZControl1
Group3 − Group1
Group2 − Control2
Group4 − Group2
Group1 − Control2
Group2 − Group1
Group3 − Group2
Control2 − ZControl1
Group4 − Group3
ZControl1
Control2
Group1
Group2
Group3
Group4

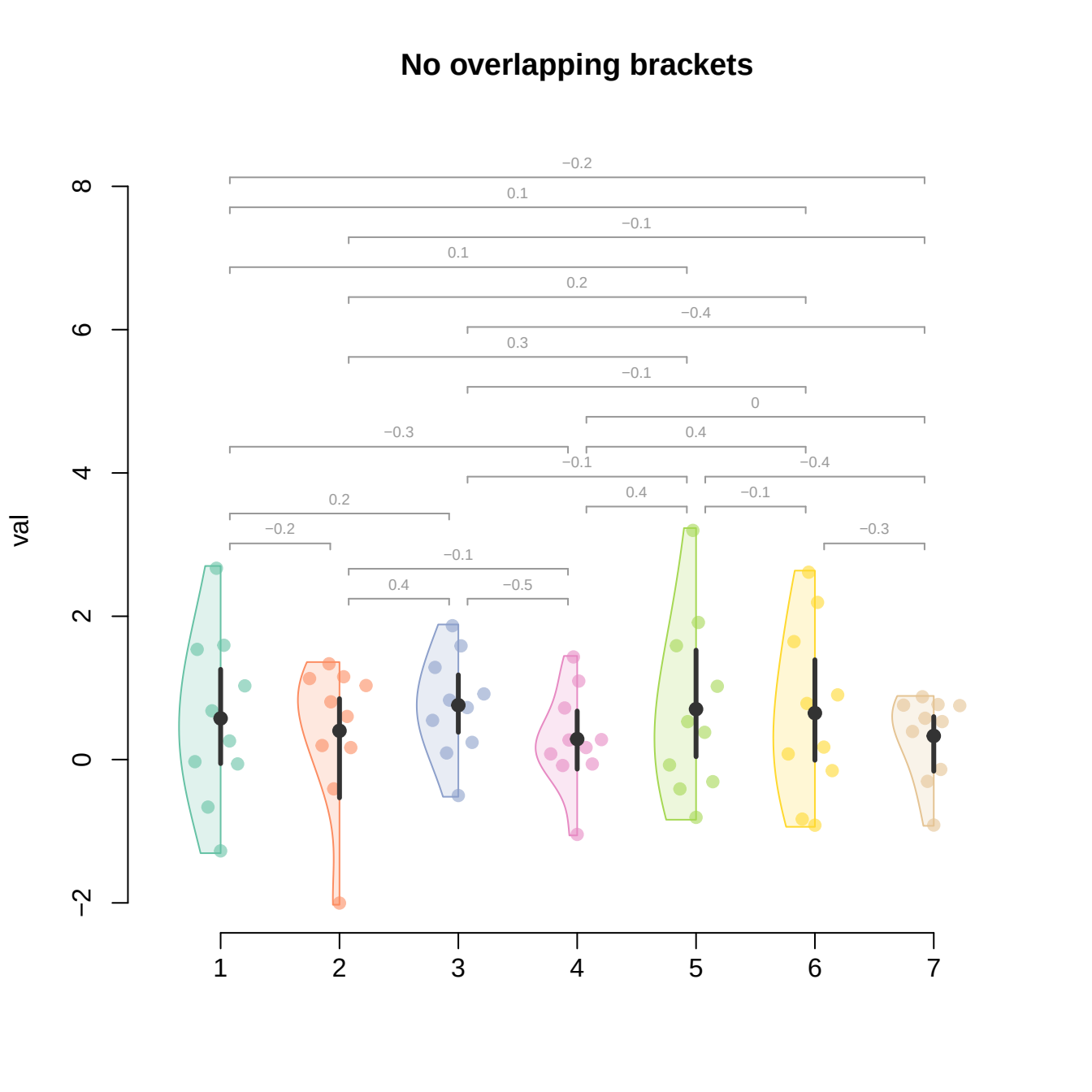

1 group in data − no bracket
val
12
11
10
9
8
G1

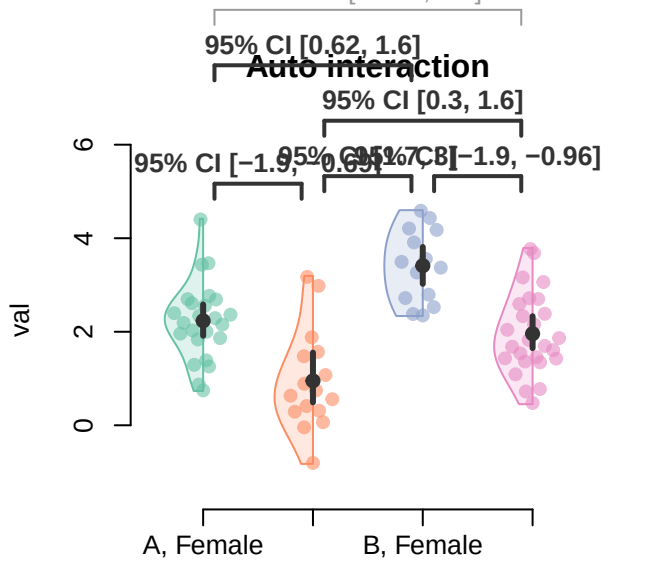

Bracket sign consistent
95% CI [−1.5, −0.66]
95% CI [−1.5, −0.66]
95% CI [−1.5, −0.66]
length
36
35
34
33
32
31
30
adult
juvenile

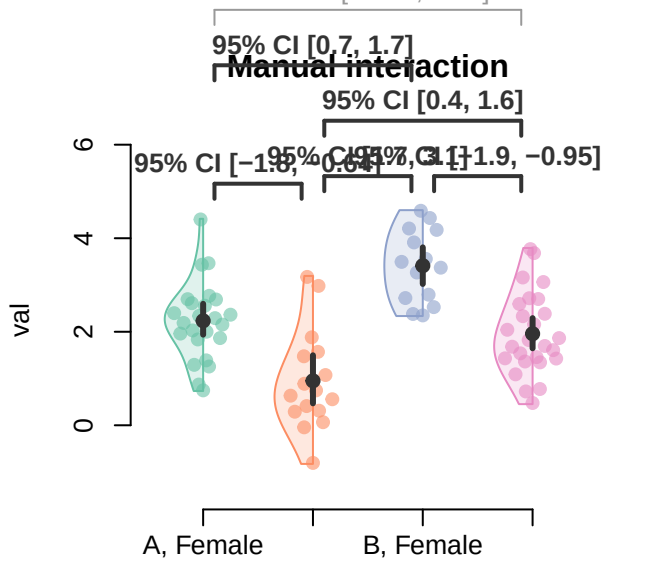

Rounding of numbers
95% CI [−2, −1]
95% CI [−1.5, −0.71]
length
30
31
32
33
34
35
36
adult
juvenile

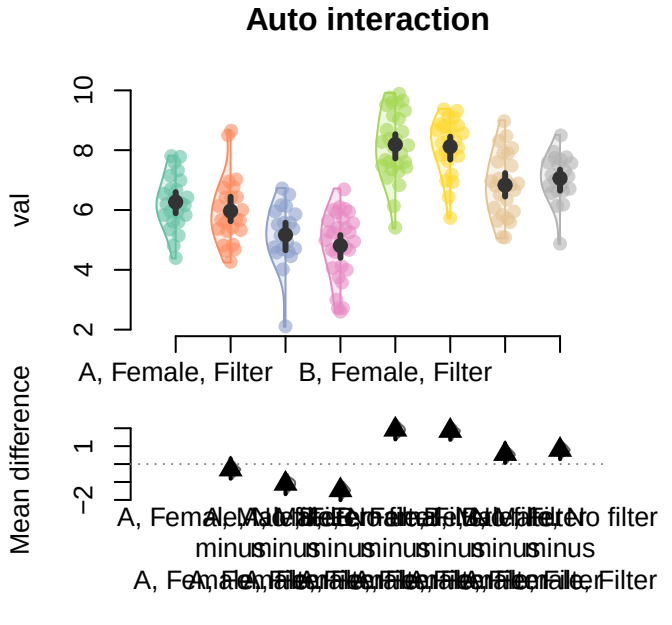

Default symbology
95% CI [−10, 2]
95% CI [−27, −14]
95% CI [9.9, 24]
height
20
40
60
80
inter_cross
self_fertilised
westerham_cross

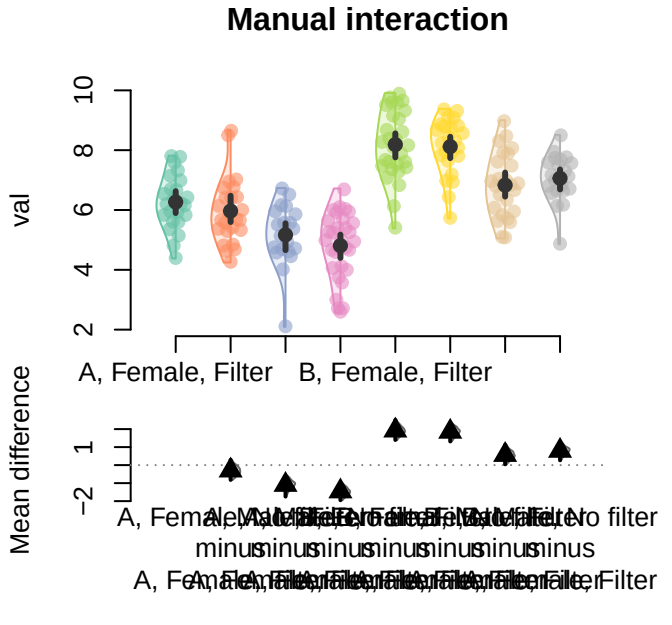

Default symbology
95% CI [−10, 2]
95% CI [−27, −14]
95% CI [9.9, 24]
height
20
40
60
80
inter_cross
self_fertilised
westerham_cross

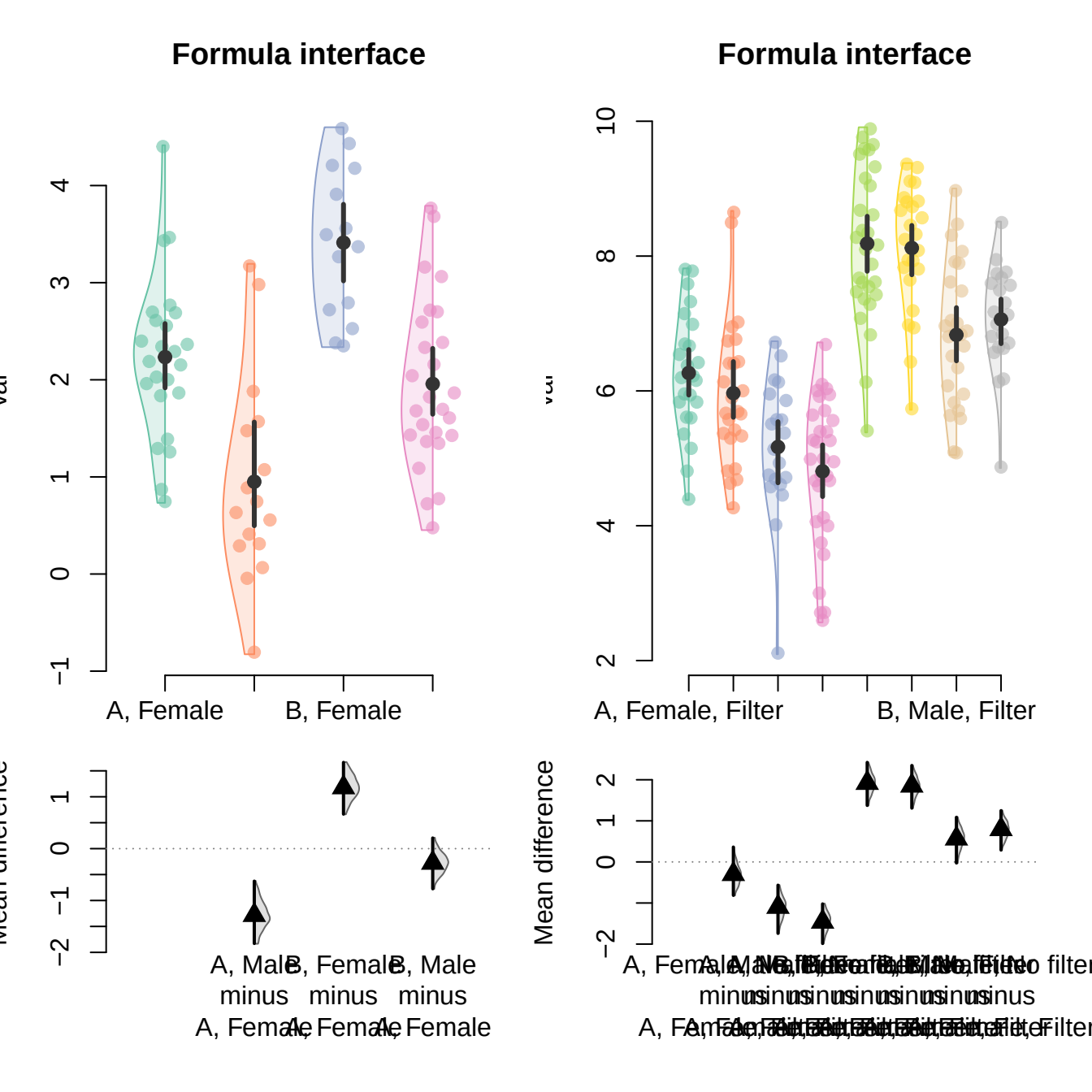

No overlapping brackets
val
8
6
4
2
0
−2
1
2
3
4
5
6
7
−0.2
0.1
−0.1
0.1
0.2
−0.4
0.3
−0.1
0
−0.3
0.4
−0.1
−0.4
0.4
−0.1
0.2
−0.2
−0.3
−0.1
0.4
−0.5

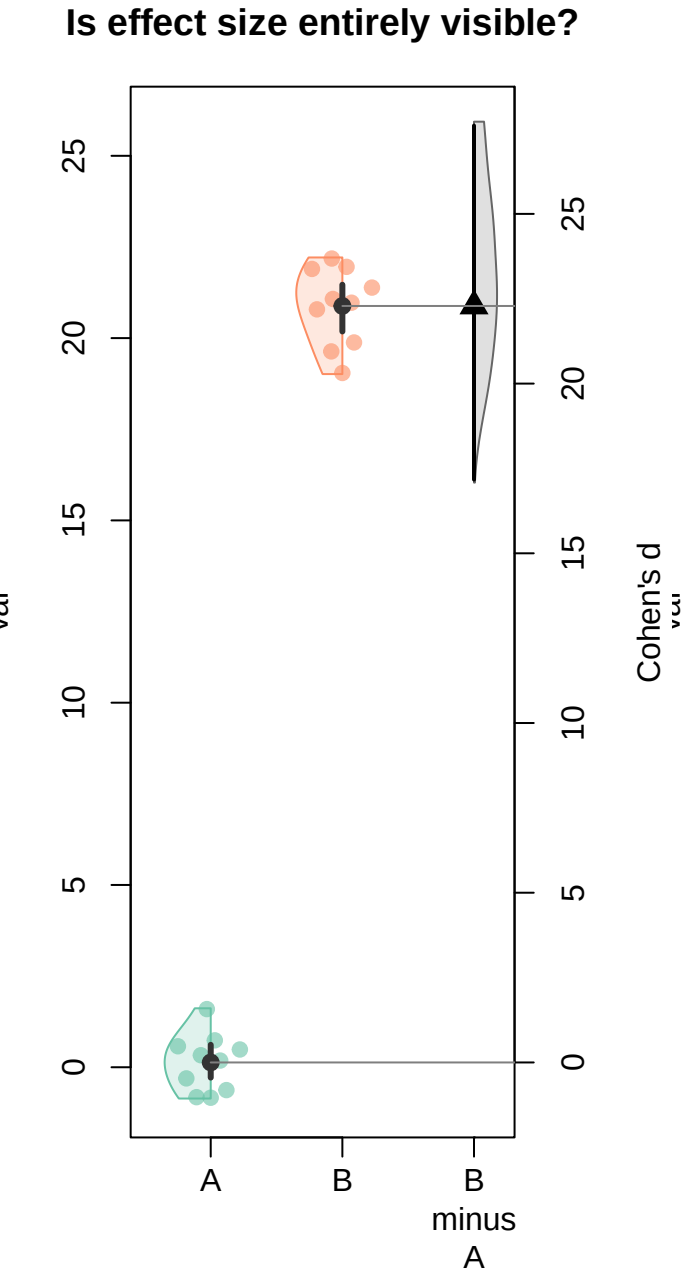

95% CI [0.62, 1.6]
Auto interaction
95% CI [0.3, 1.6]
95% CI [−1.9, −0.96]
val
A, Female
B, Female

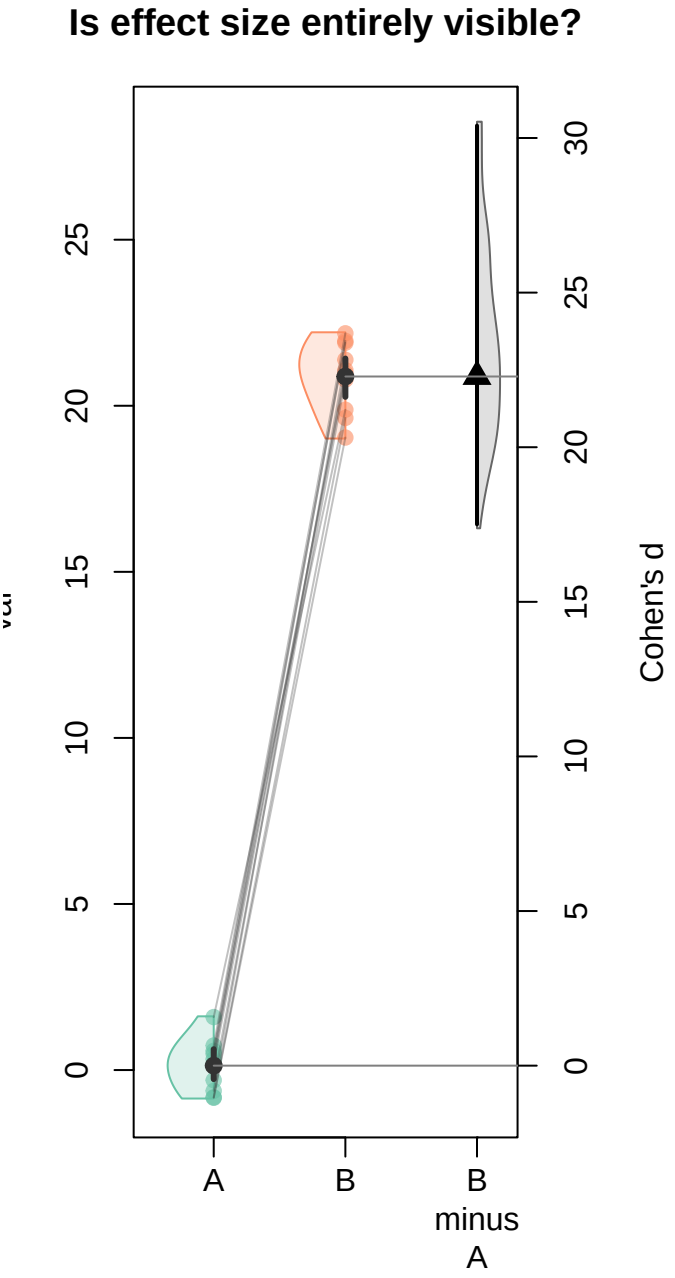

95% CI [0.7, 1.7]
Manual interaction
95% CI [0.4, 1.6]
95% CI [−1.9, −0.95]
val
A, Female
B, Female

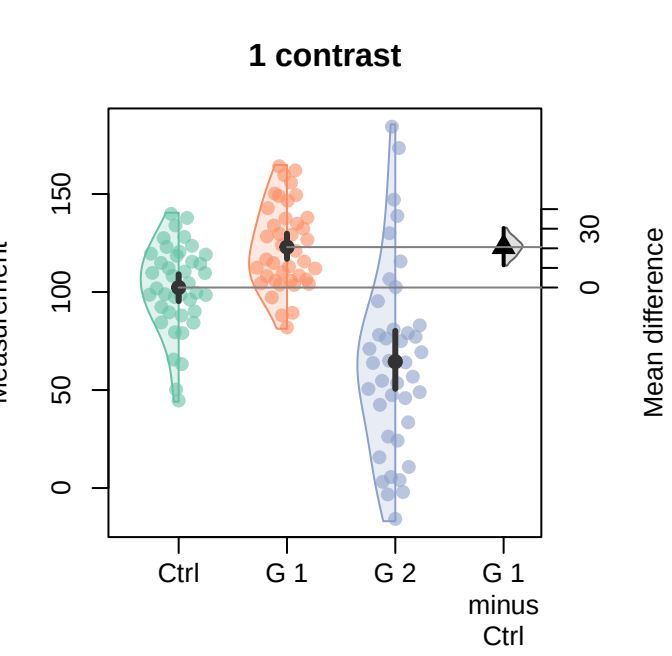

Auto interaction
val
A, Female, Filter
B, Female, Filter
Mean difference
No filter

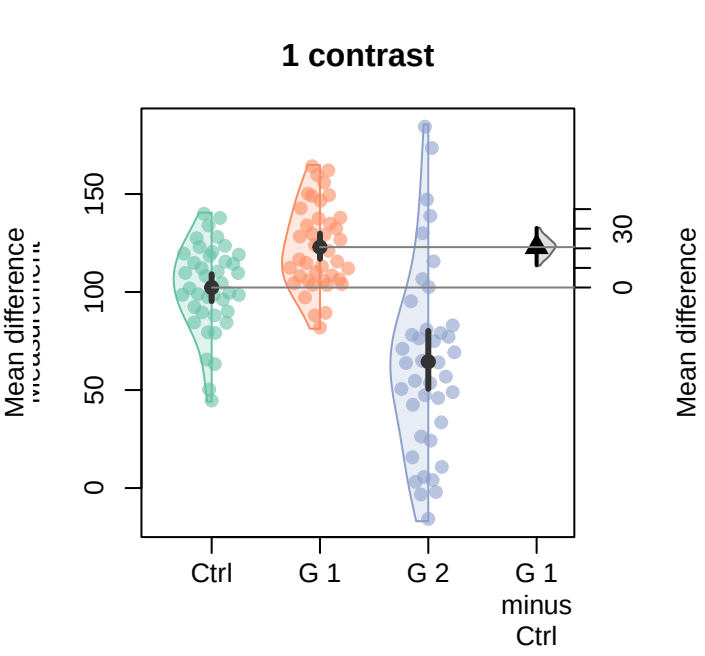

Manual interaction
val
A, Female, Filter
B, Female, Filter
Mean difference
No filter

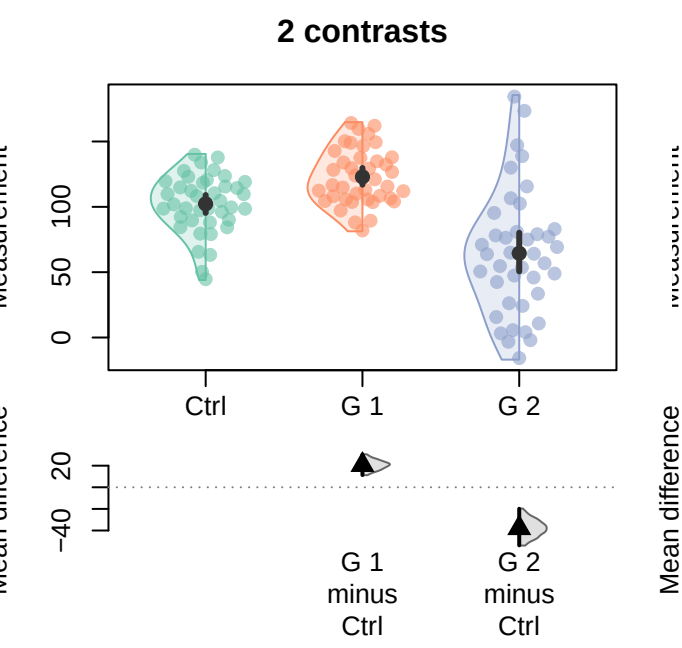

Formula interface
val
4
3
2
1
0
−1
A, Female
B, Female
Mean difference
2
1
0
−1
−2
A, Male minus A, Female
B, Female minus A, Female
B, Male minus A, Female
Formula interface
val
10
8
6
4
2
A, Female, Filter
B, Male, Filter
Mean difference
2
1
0
−2
A, Female, Filter minus A, Female, Filter

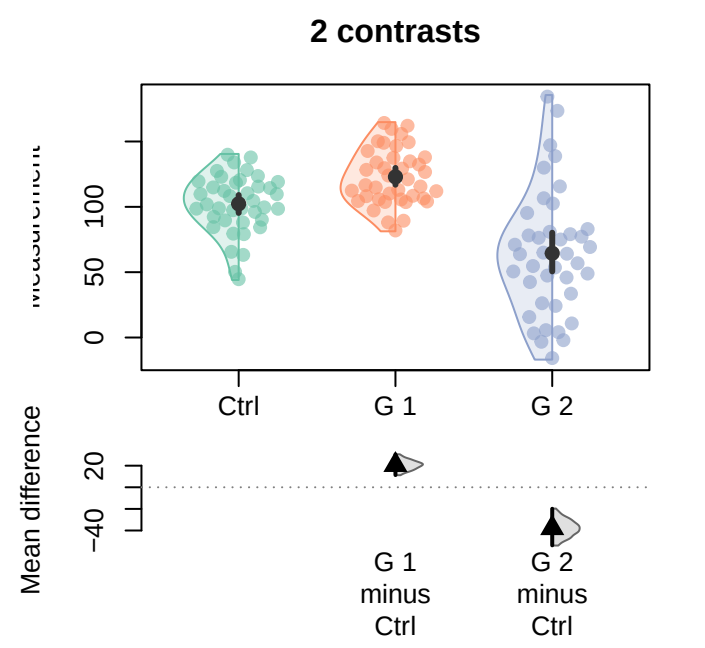

Is effect size entirely visible?
0
5
10
15
20
25
A
B
B minus A
Cohen's d

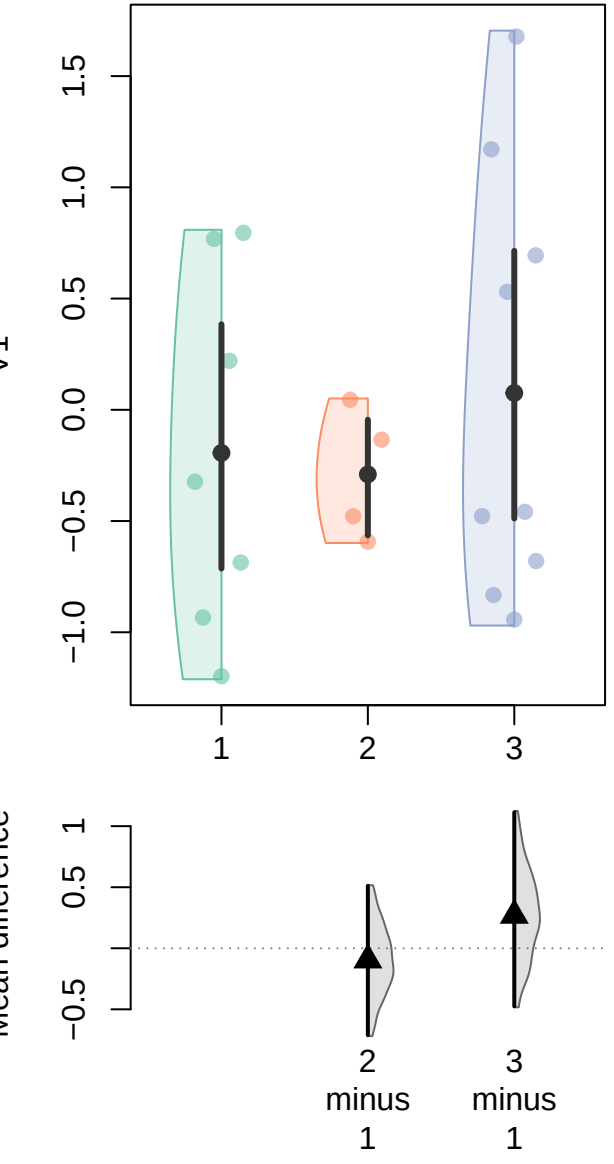

Is effect size entirely visible?
0
5
10
15
20
25
30
A
B
B minus A
Cohen's d

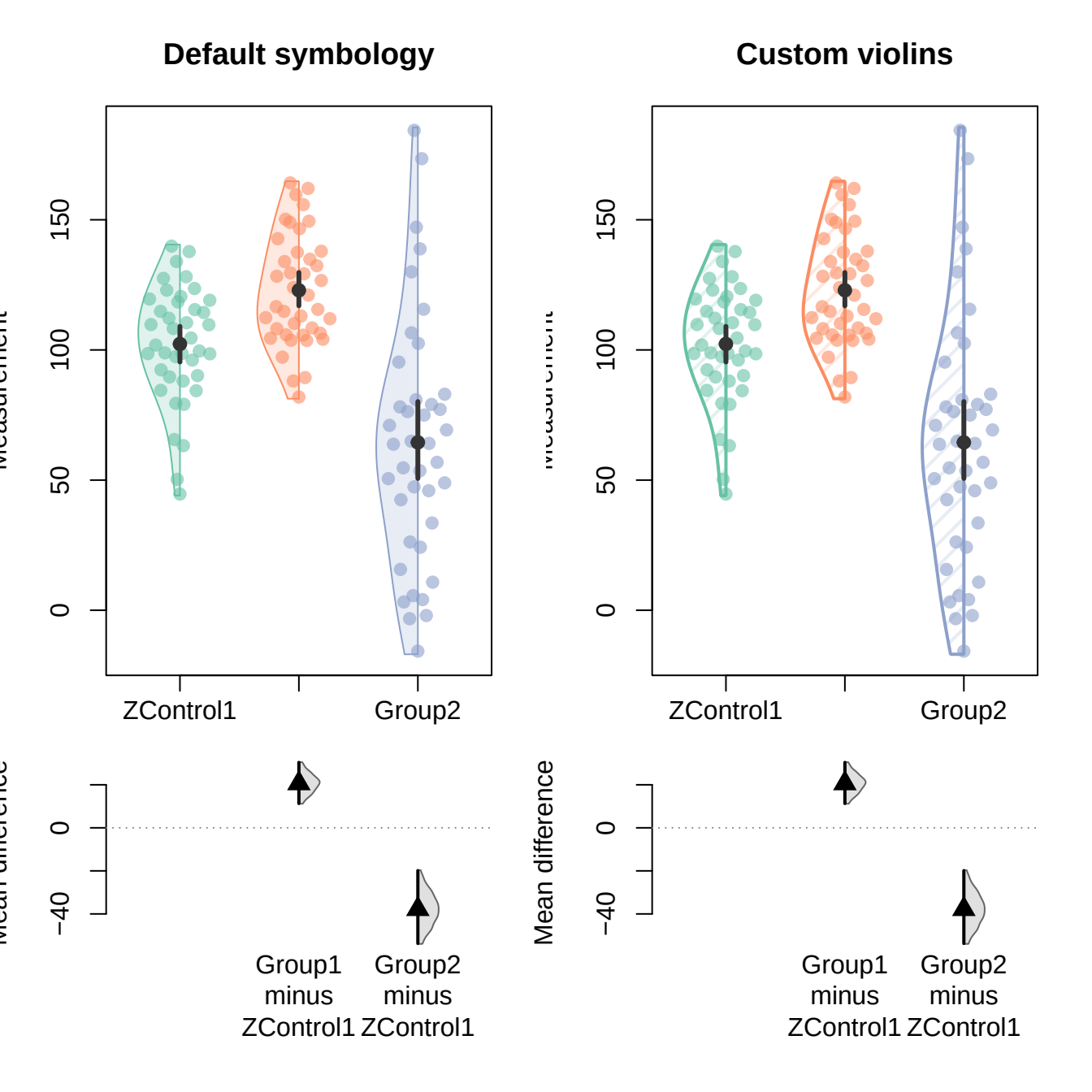

1 contrast
Measurement
0
50
100
150
0
30
Ctrl
G 1
G 2
G 1
minus
Ctrl

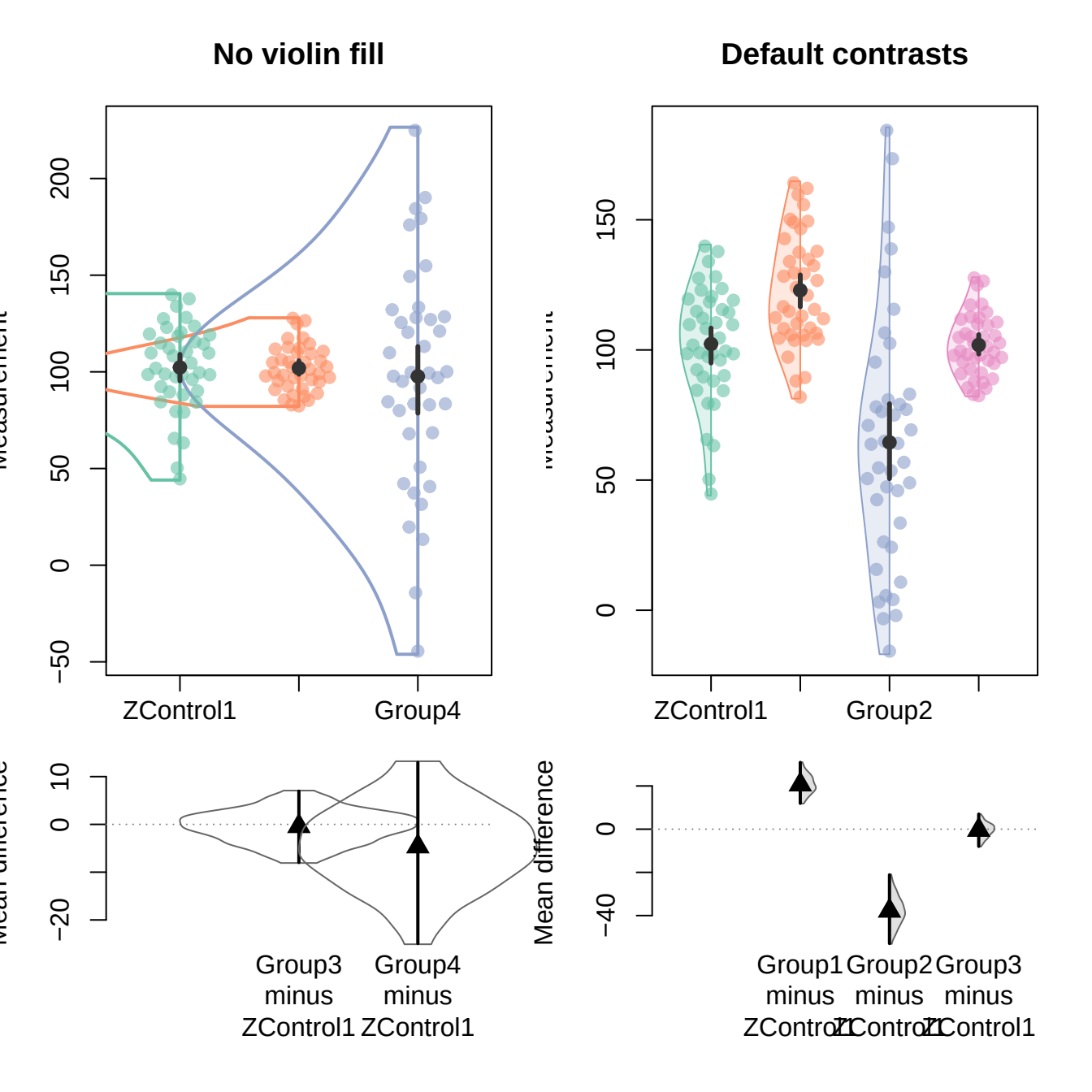

1 contrast
Mean difference
0
50
100
150
0
30
Ctrl
G 1
G 2
G 1
minus
Ctrl

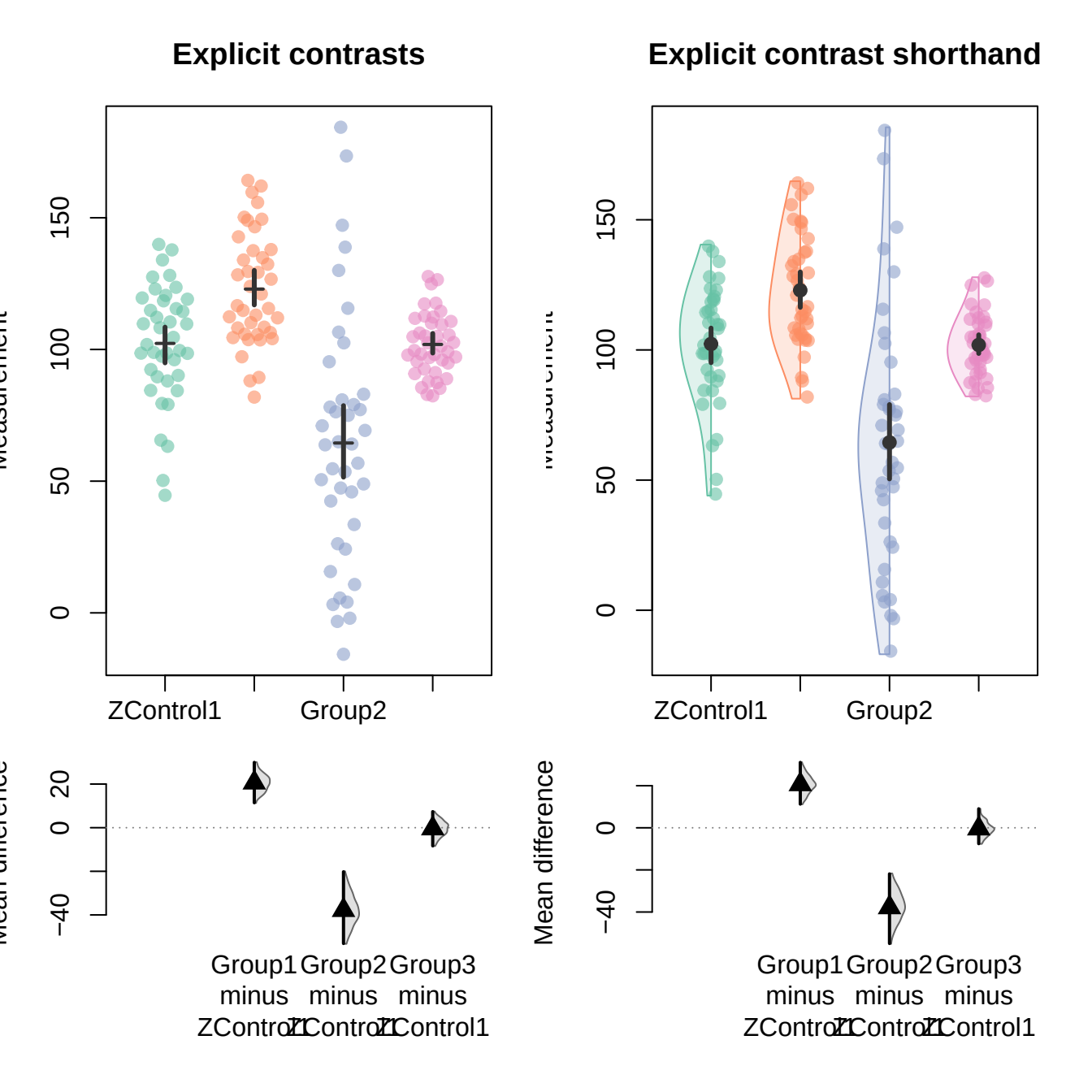

2 contrasts
Measurement
0
50
100
Mean difference
−40
20
Ctrl
G 1
G 2
G 1
minus
Ctrl
G 2
minus
Ctrl

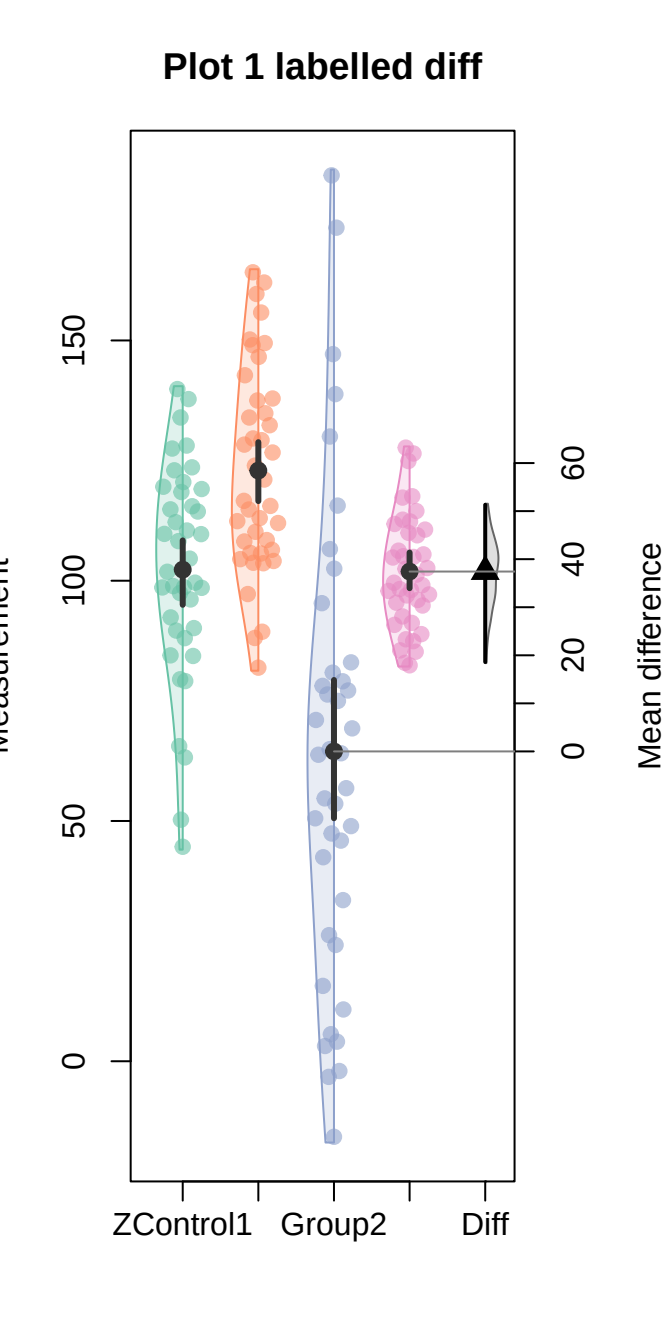

2 contrasts
Measurement
0
50
100
Mean difference
−40
20
Ctrl
G 1
G 2
G 1
minus
Ctrl
G 2
minus
Ctrl

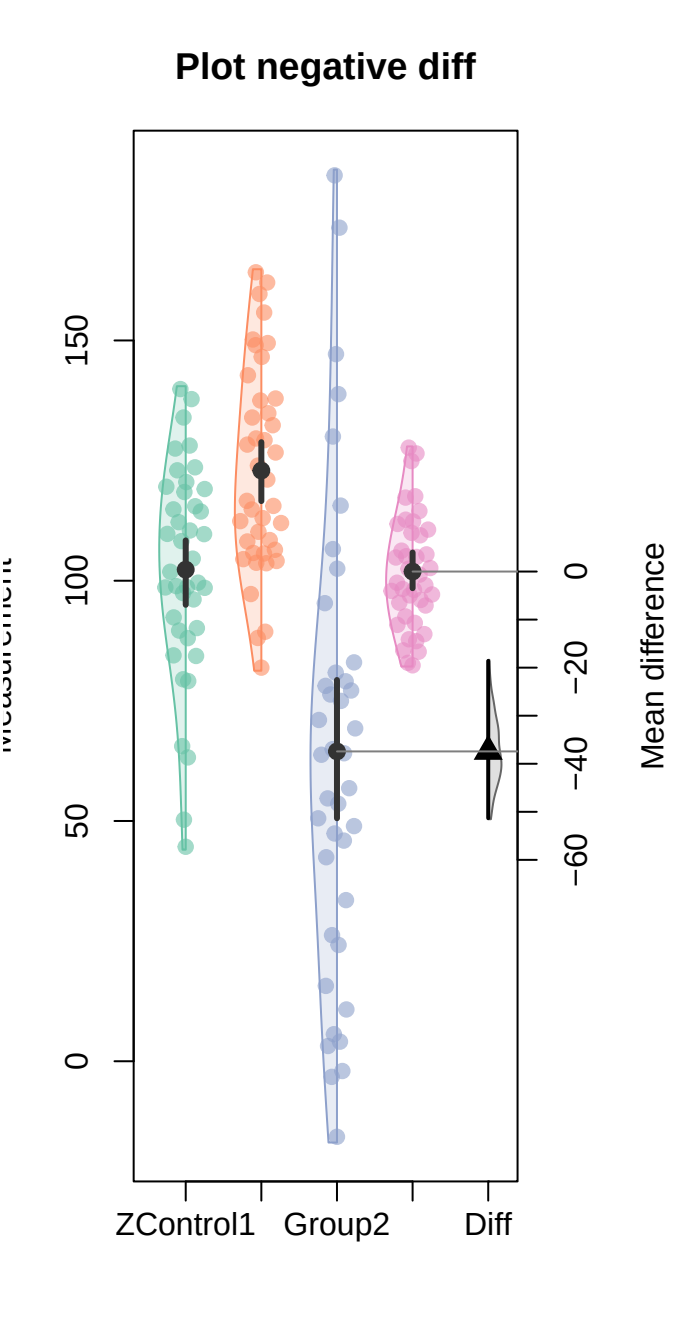

v1
1.5
1.0
0.5
0.0
−0.5
−1.0
1
2
3
Mean difference
1
0.5
−0.5
2
minus
1
3
minus
1


Default symbology
Custom violins
Measurement
150
100
50
0
ZControl1
Group2
Mean difference
0
−40
Group1
minus
ZControl1
Group2
minus
ZControl1


No violin fill
Default contrasts
Measurement
200
150
100
50
0
−50
ZControl1
Group4
Group2
Mean difference
10
0
−20
−40
Group3
minus
ZControl1
Group4
minus
ZControl1
Group1
minus
ZControl1
Group2
minus
ZControl1
Group3
minus
ZControl1

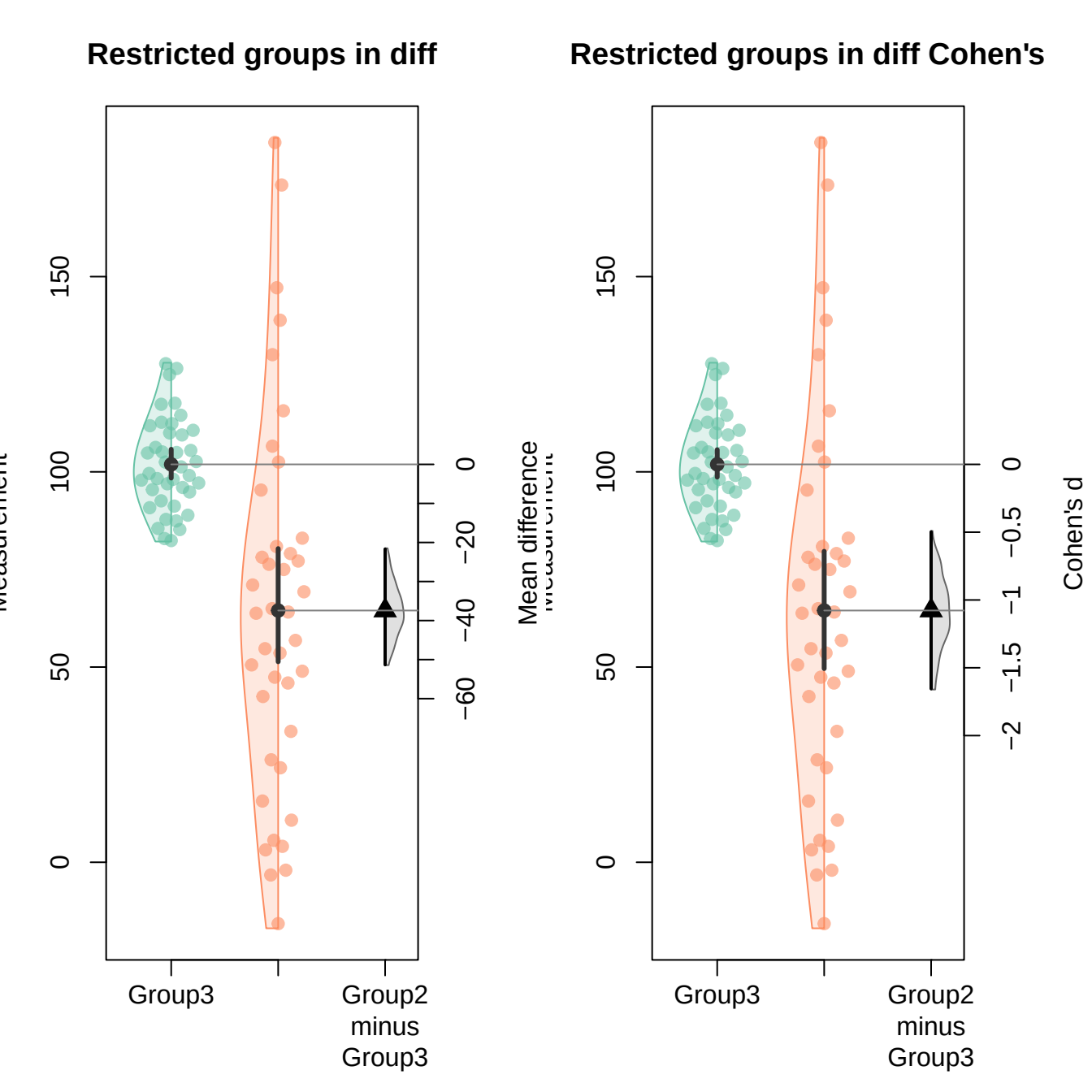

Explicit contrasts
Explicit contrast shorthand
Measurement
Mean difference
0
50
100
150
ZControl1
Group2
20
0
−40
Group1 minus ZControl1
Group2 minus ZControl1
Group3 minus ZControl1

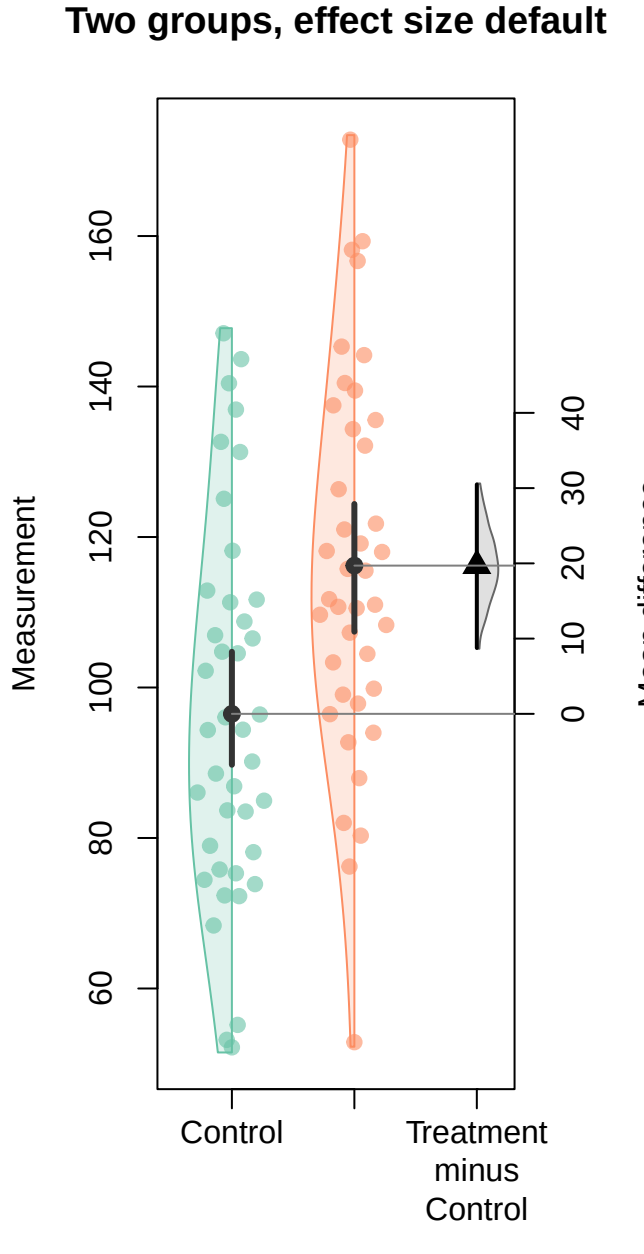

Plot 1 labelled diff
Measurement
150
100
50
0
60
40
20
0
Mean difference
ZControl1
Group2
Diff

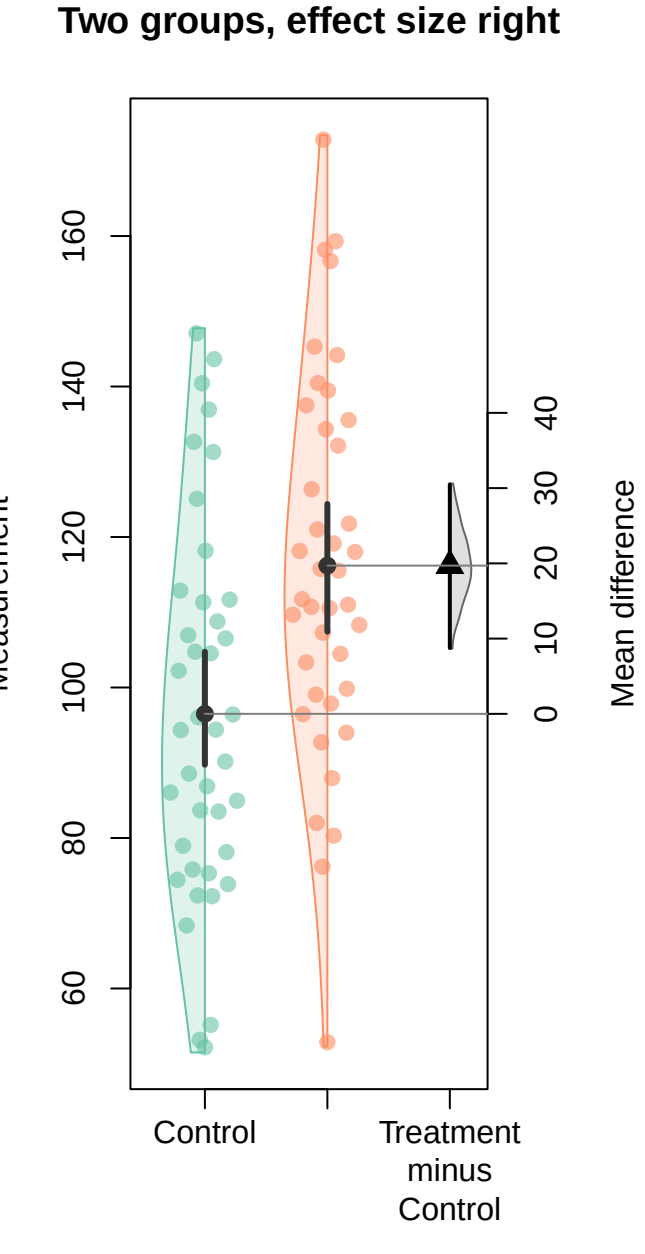

Plot negative diff
Measurement
150
100
50
0
0
−20
−40
−60
Mean difference
ZControl1
Group2
Diff

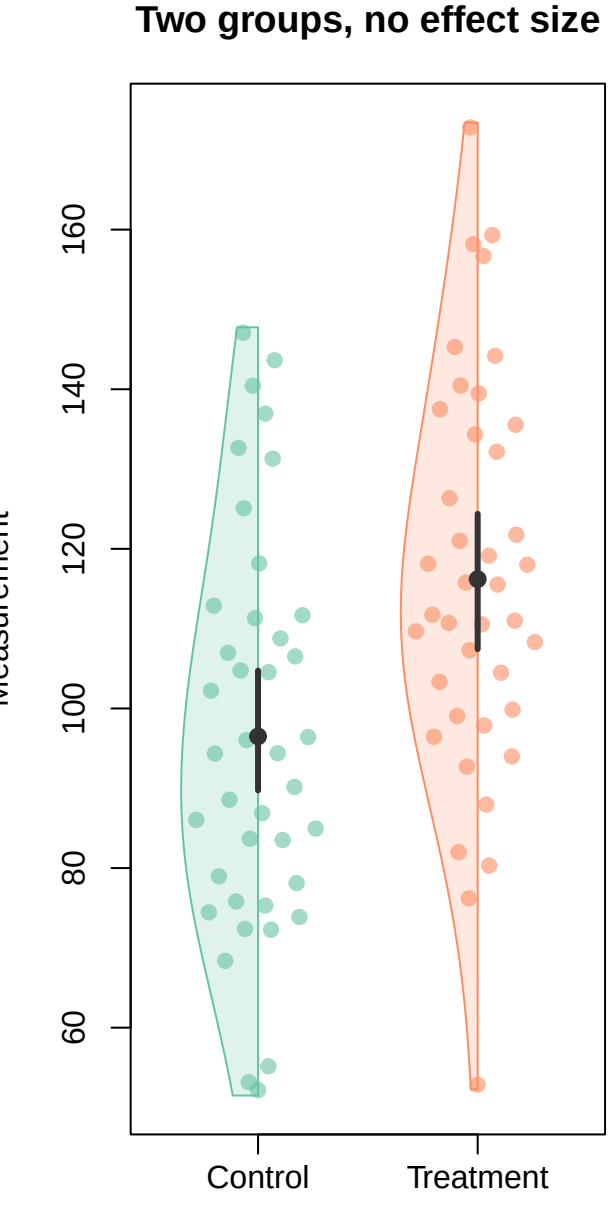
Plot 1 Cohen's

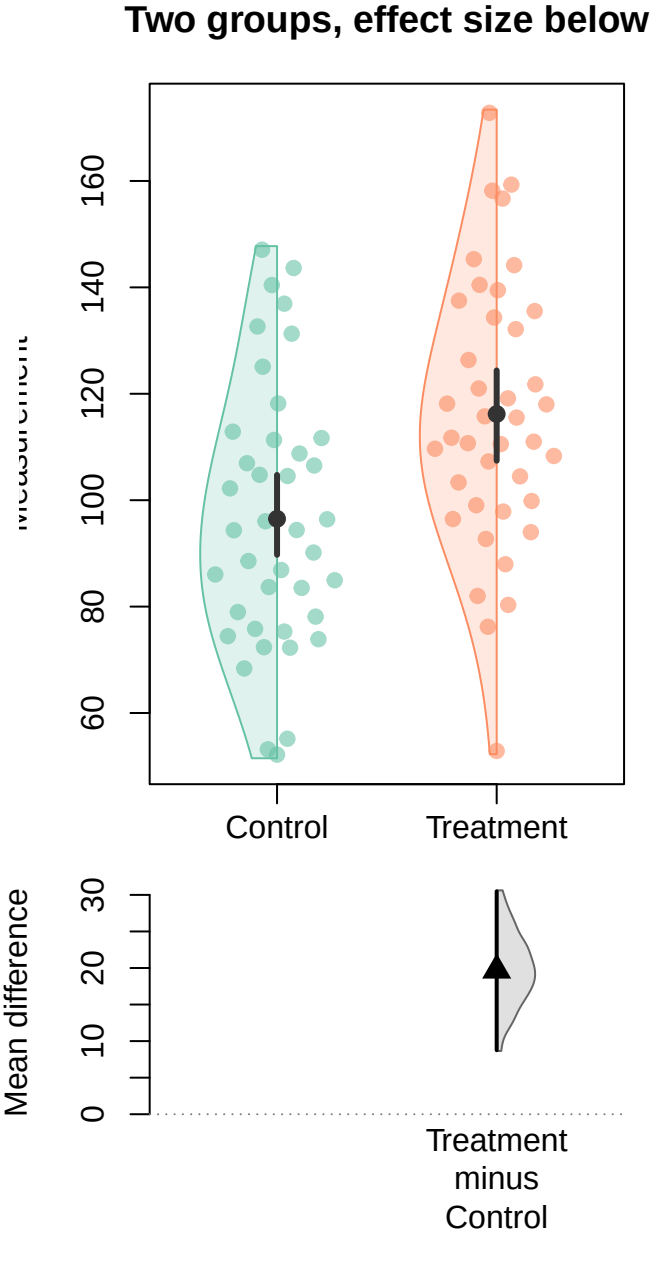
Plot negative Cohen's

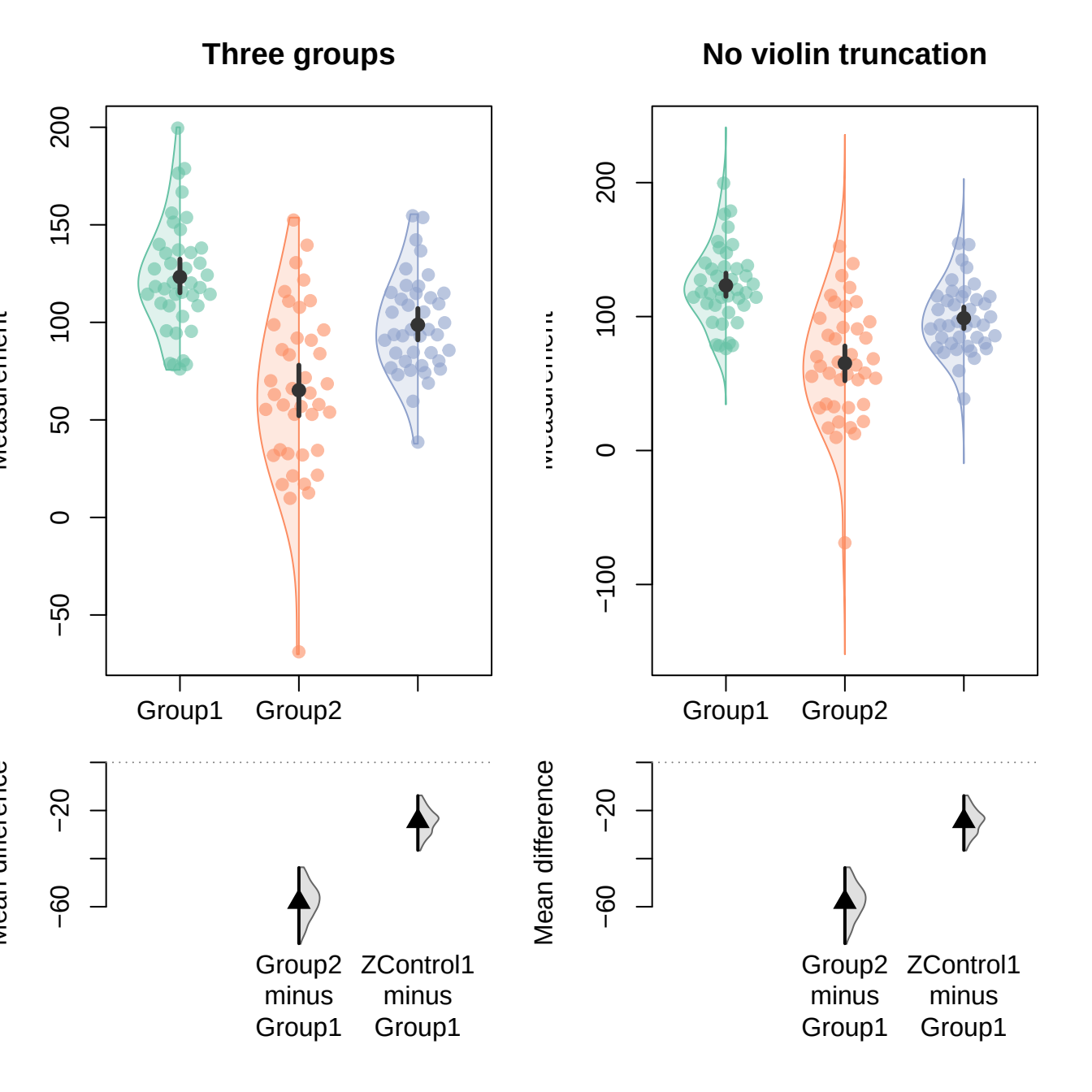

Restricted groups in diff
Measurement
150
100
50
0
0
−20
−40
−60
Mean difference
Group3
Group2
minus
Group3
Restricted groups in diff Cohen's
Measurement
150
100
50
0
0
−0.5
−1
−1.5
−2
Cohen's d
Group3
Group2
minus
Group3

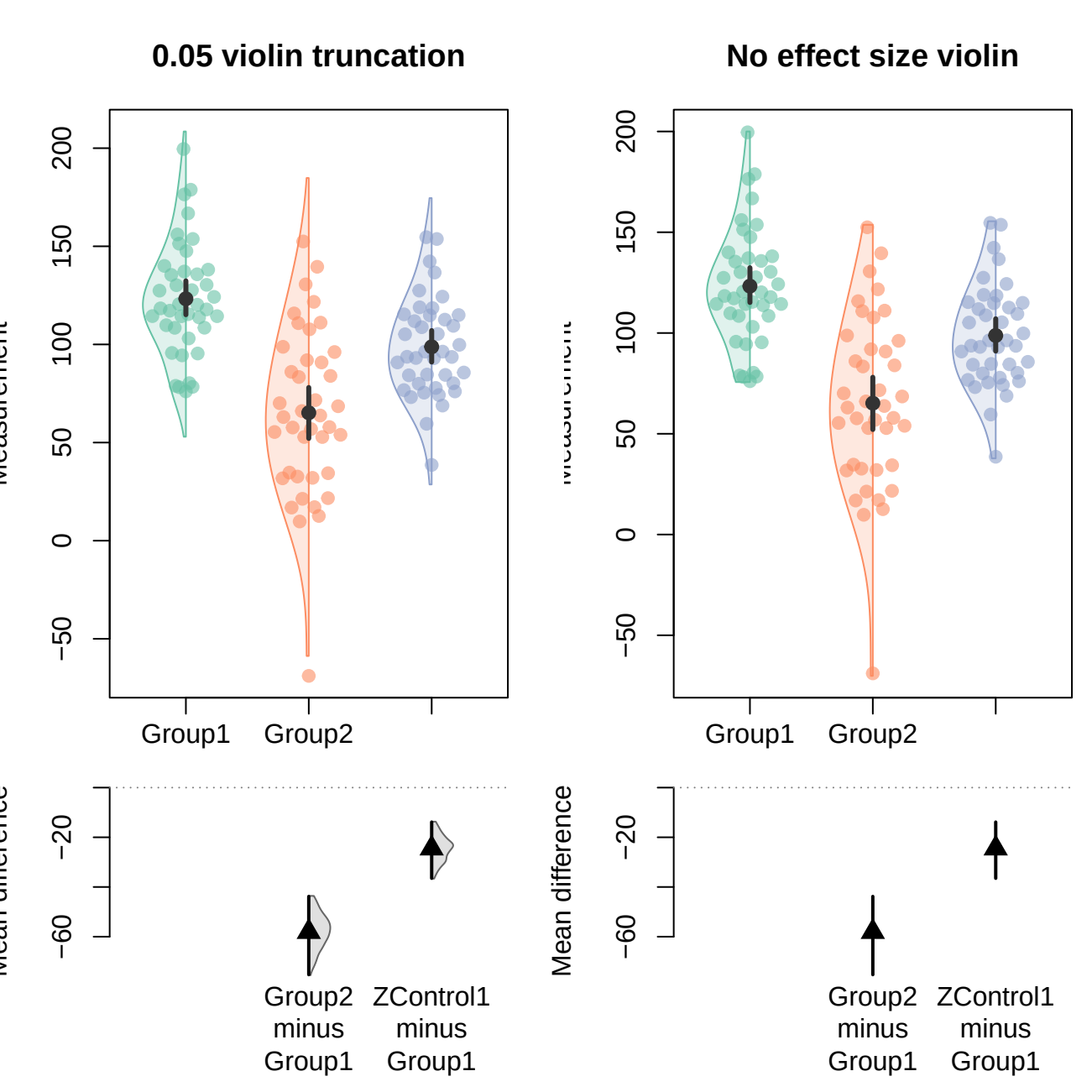

Two groups, effect size default
Measurement
160
140
120
100
80
60
Mean difference
40
30
20
10
0
Control
Treatment
minus
Control

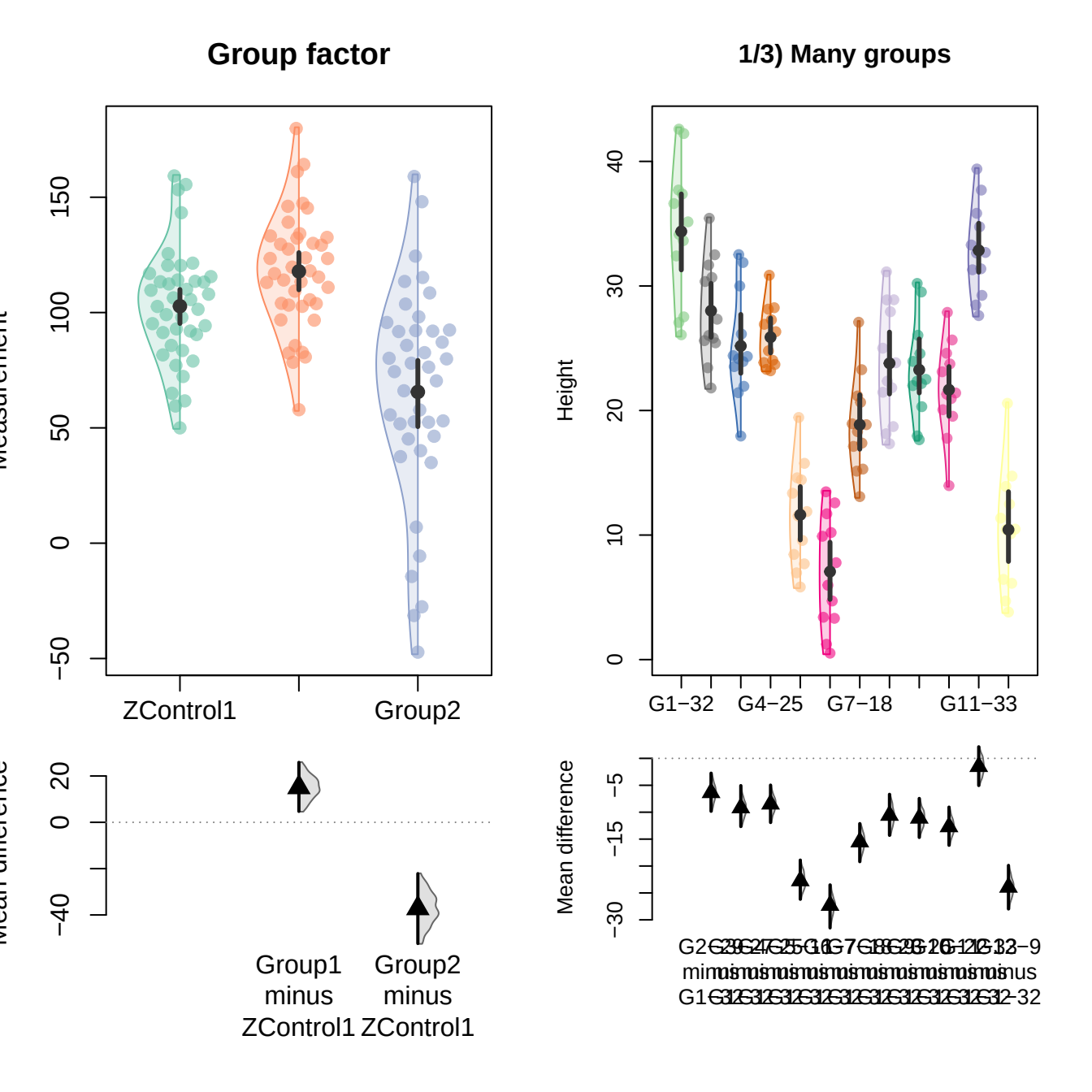

Two groups, effect size right
Measurement
160
140
120
100
80
60
Mean difference
40
30
20
10
0
Control
Treatment
minus
Control

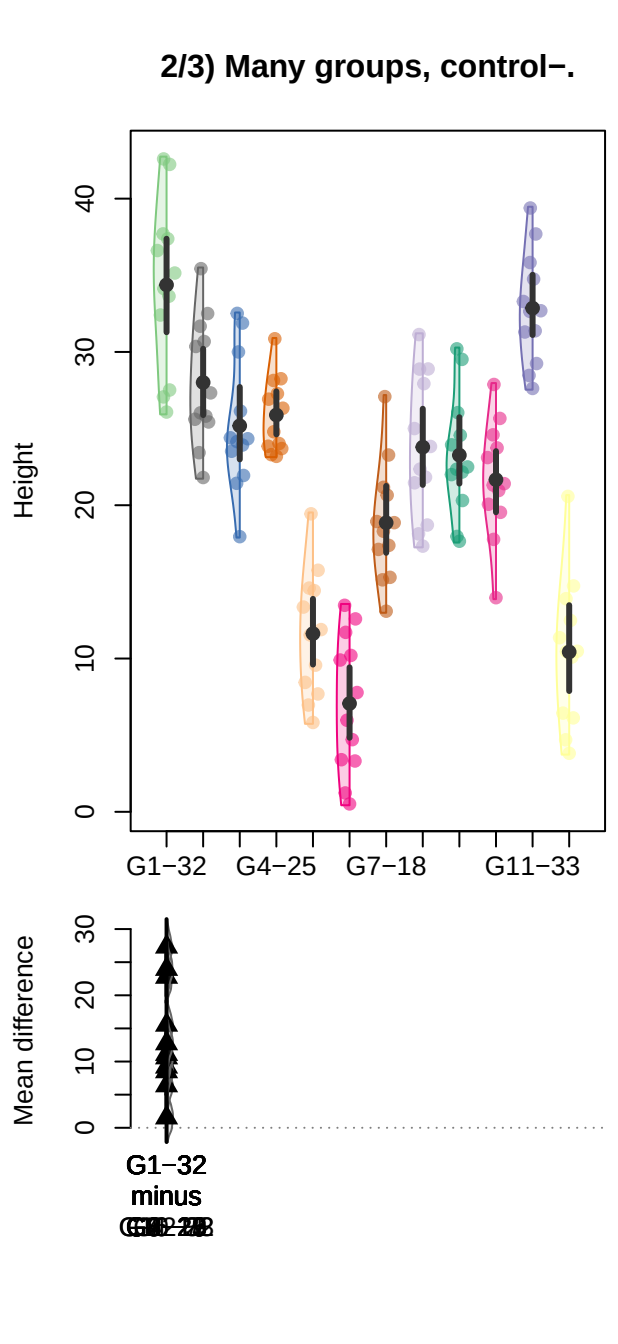

Two groups, no effect size
Measurement
160
140
120
100
80
60
Control
Treatment

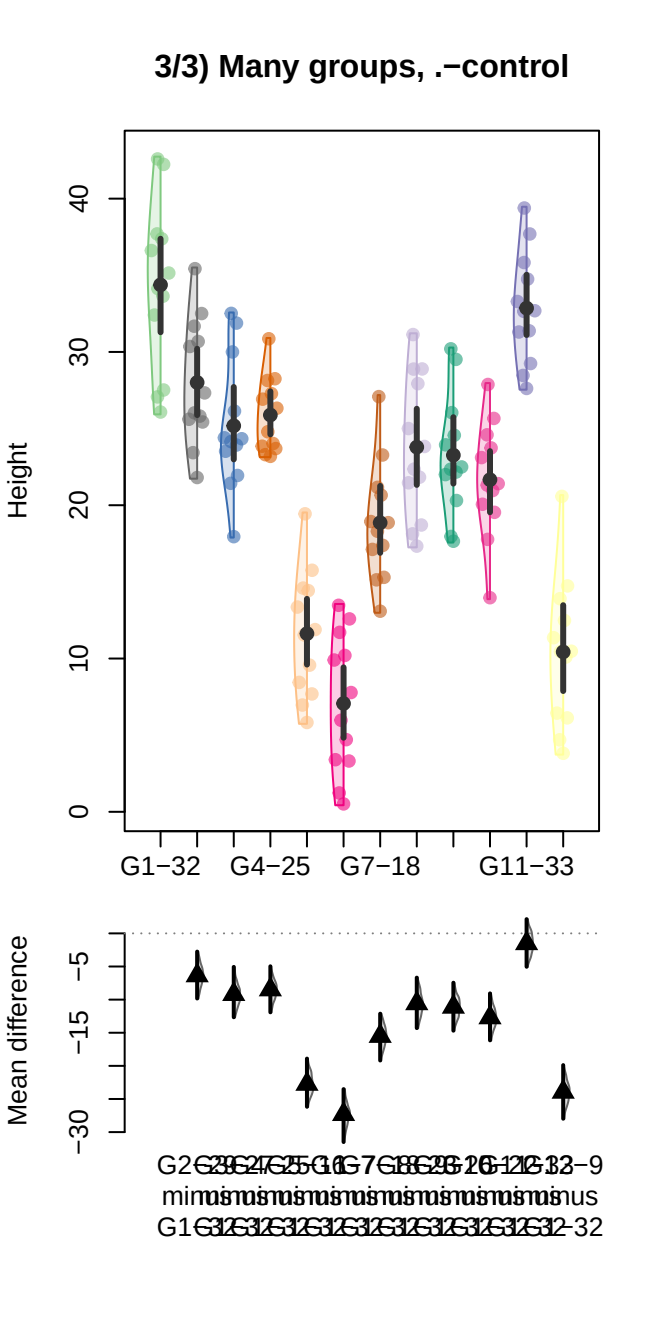

Two groups, effect size below
Measurement
160
140
120
100
80
60
Control
Treatment
Mean difference
30
20
10
0
Treatment
minus
Control

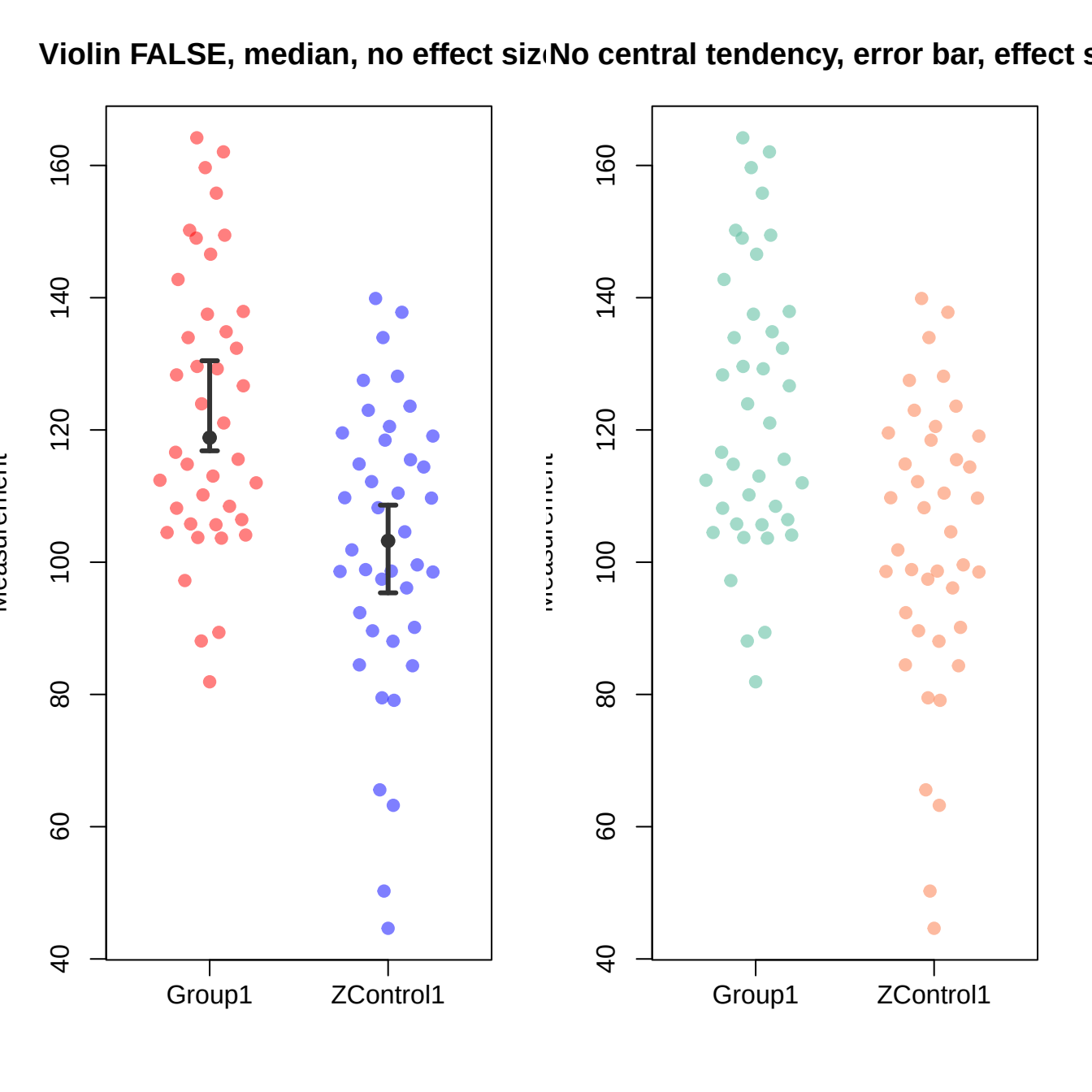

Three groups
No violin truncation
Measurement
200
150
100
50
0
−50
−100
Group1
Group2
Mean difference
−20
−60
Group2
minus
Group1
ZControl1
minus
Group1

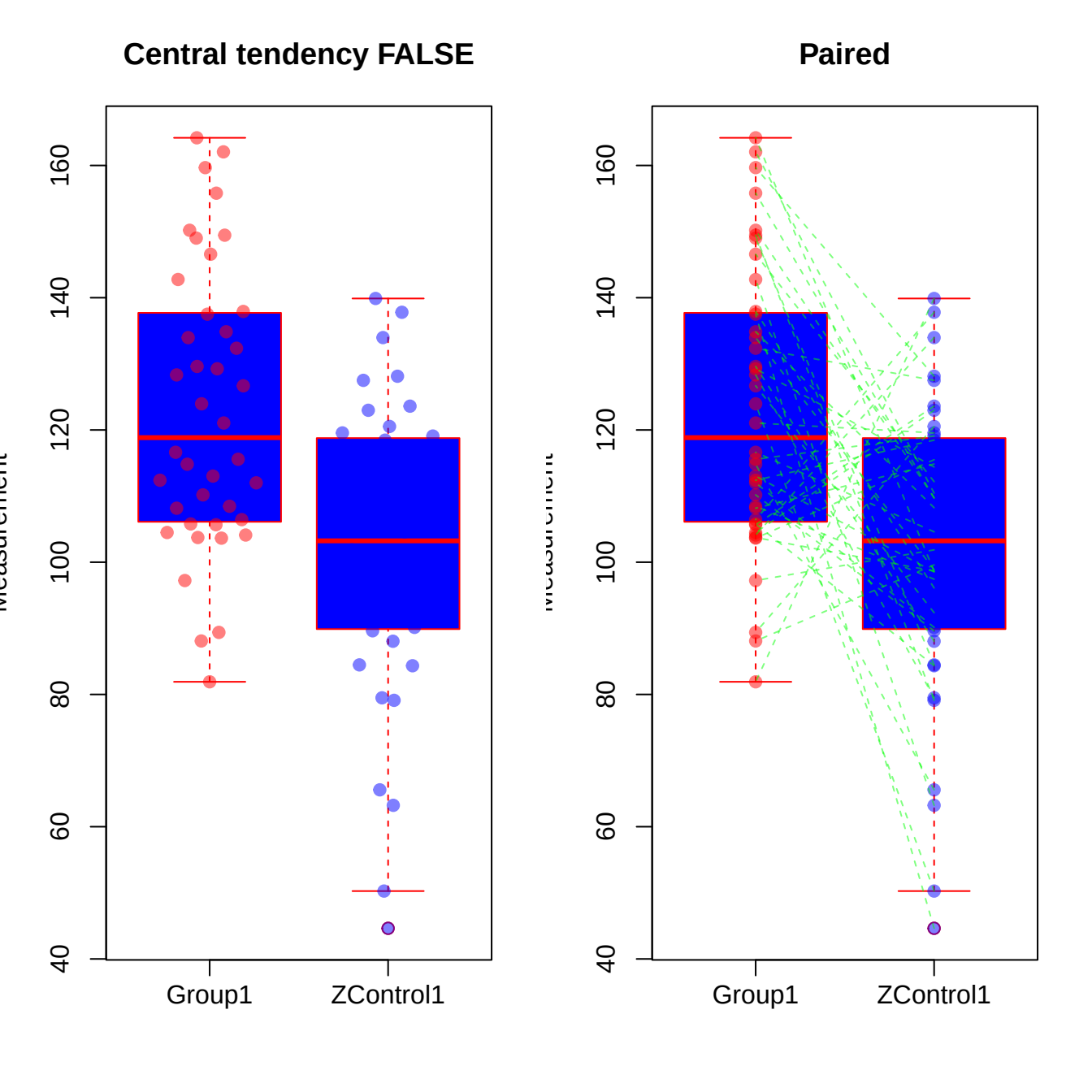

0.05 violin truncation
No effect size violin
Measurement
200
150
100
50
0
−50
Group1
Group2
Mean difference
−20
−60
Group2
minus
Group1
ZControl1
minus
Group1

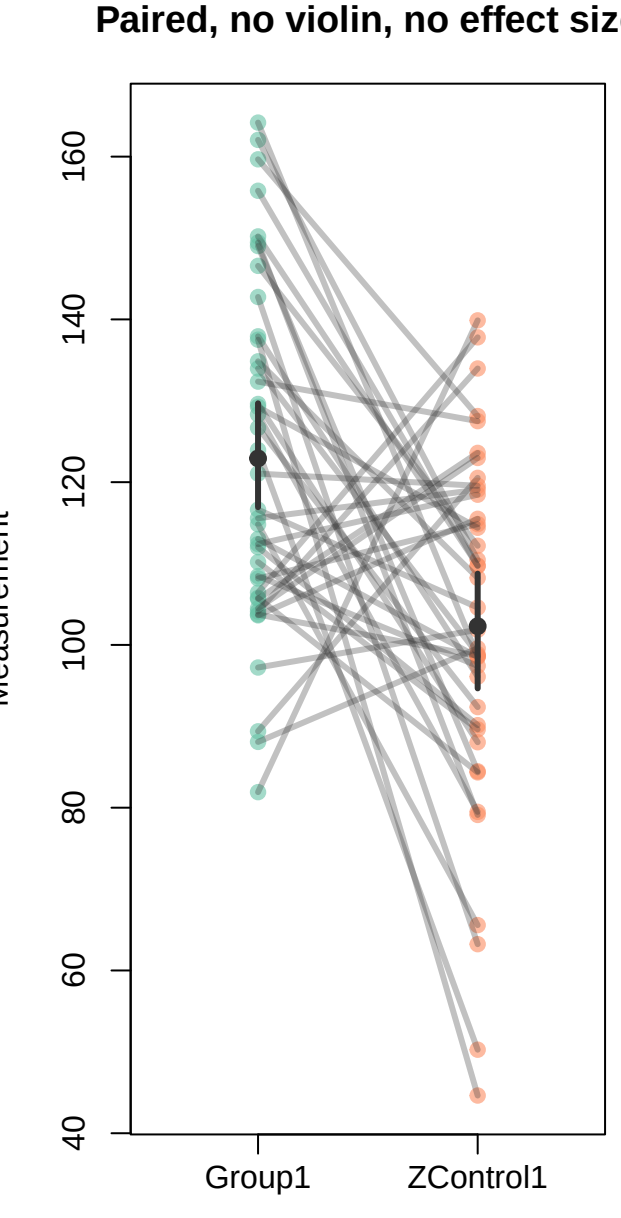

Group factor
Measurement
150
100
50
0
−50
ZControl1
Group2
Mean difference
20
0
−40
Group1
minus
ZControl1
Group2
minus
ZControl1
1/3) Many groups
Height
40
30
20
10
0
G1−32
G4−25
G7−18
G11−33
Mean difference
−5
−15
−30

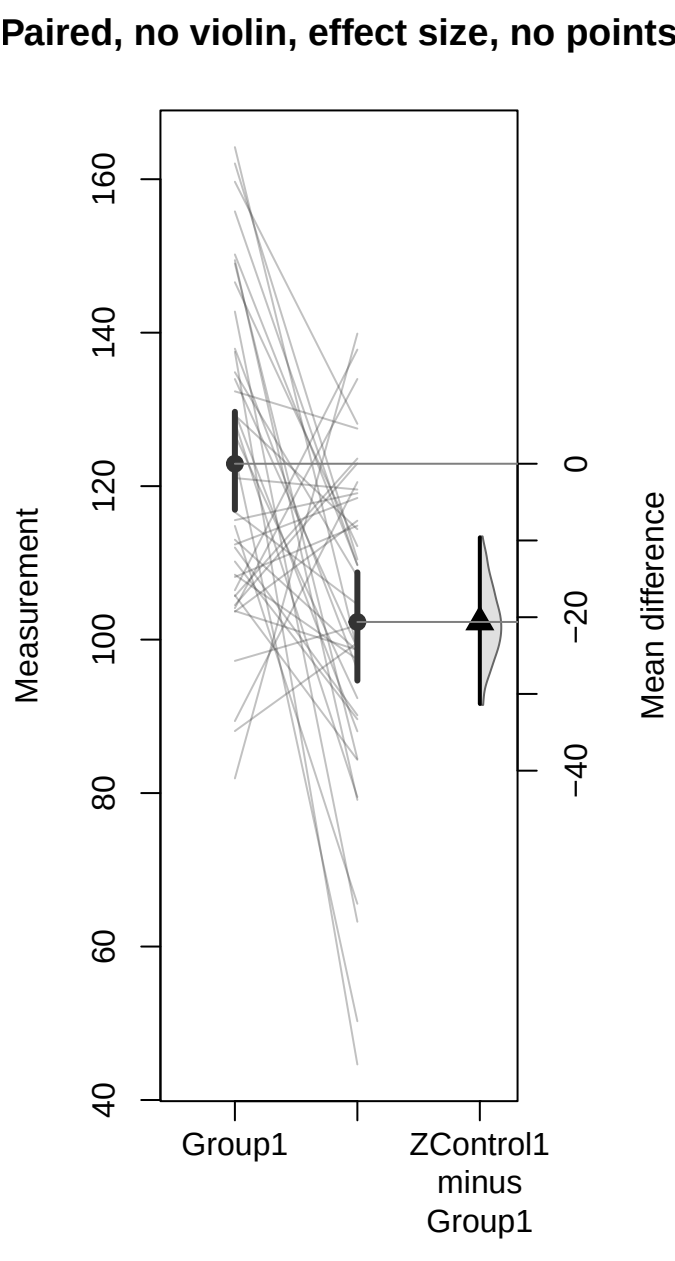

2/3) Many groups, control−.
Height
0
10
20
30
40
G1−32
G4−25
G7−18
G11−33
Mean difference
0
10
20
30
G1−32
minus

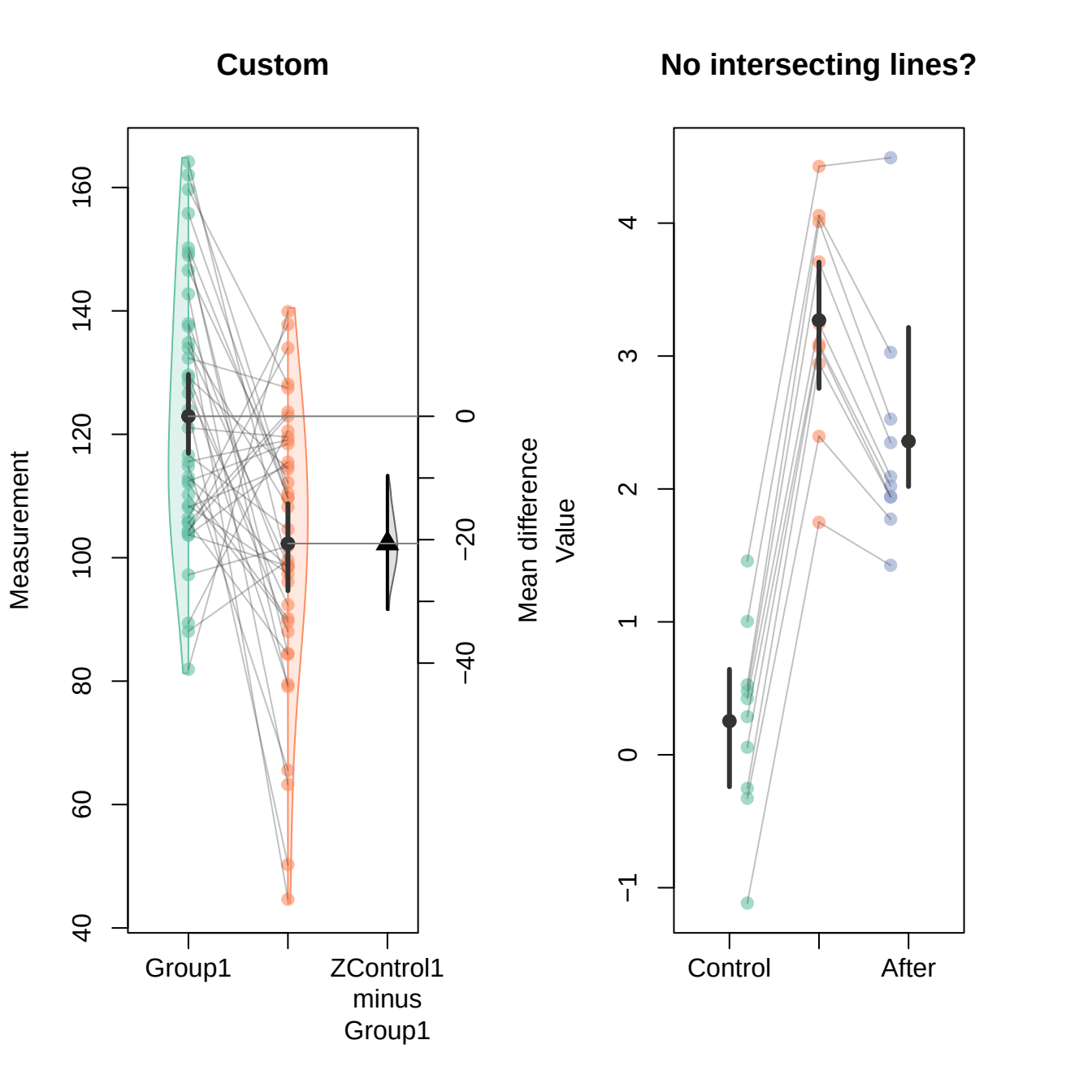

3/3) Many groups, .−control
Height
0
10
20
30
40
G1−32
G4−25
G7−18
G11−33
Mean difference
−30
−15
−5

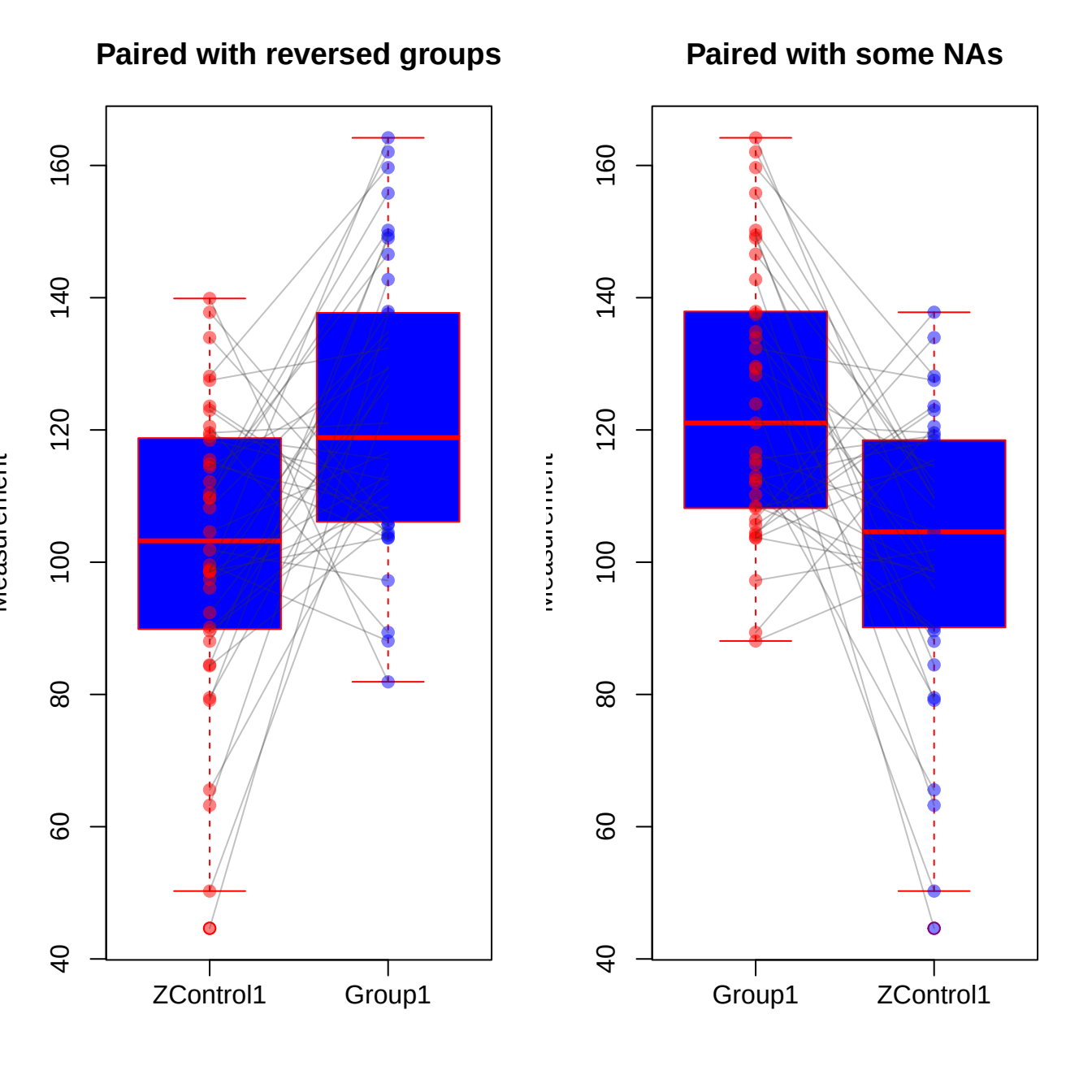

Violin FALSE, median, no effect siz
No central tendency, error bar, effect s
Measurement
160
140
120
100
80
60
40
Group1
ZControl1


Central tendency FALSE
Paired
Measurement
40
60
80
100
120
140
160
Group1
ZControl1

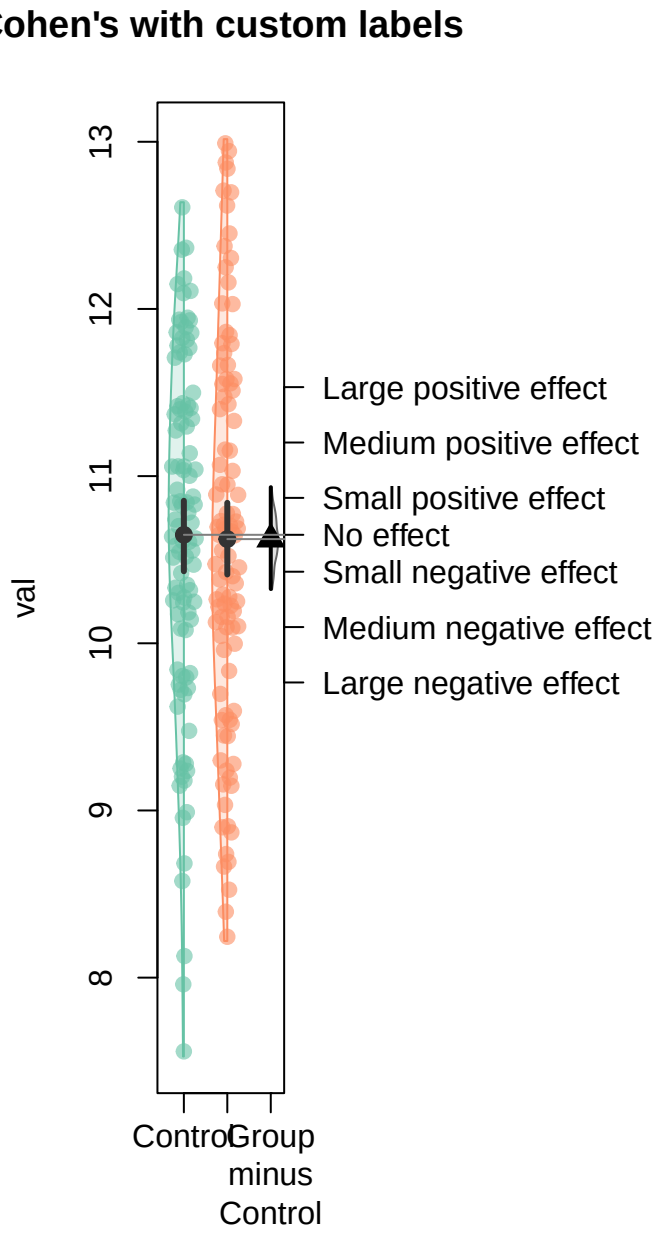

Paired, no violin, no effect size
Measurement
160
140
120
100
80
60
40
Group1
ZControl1

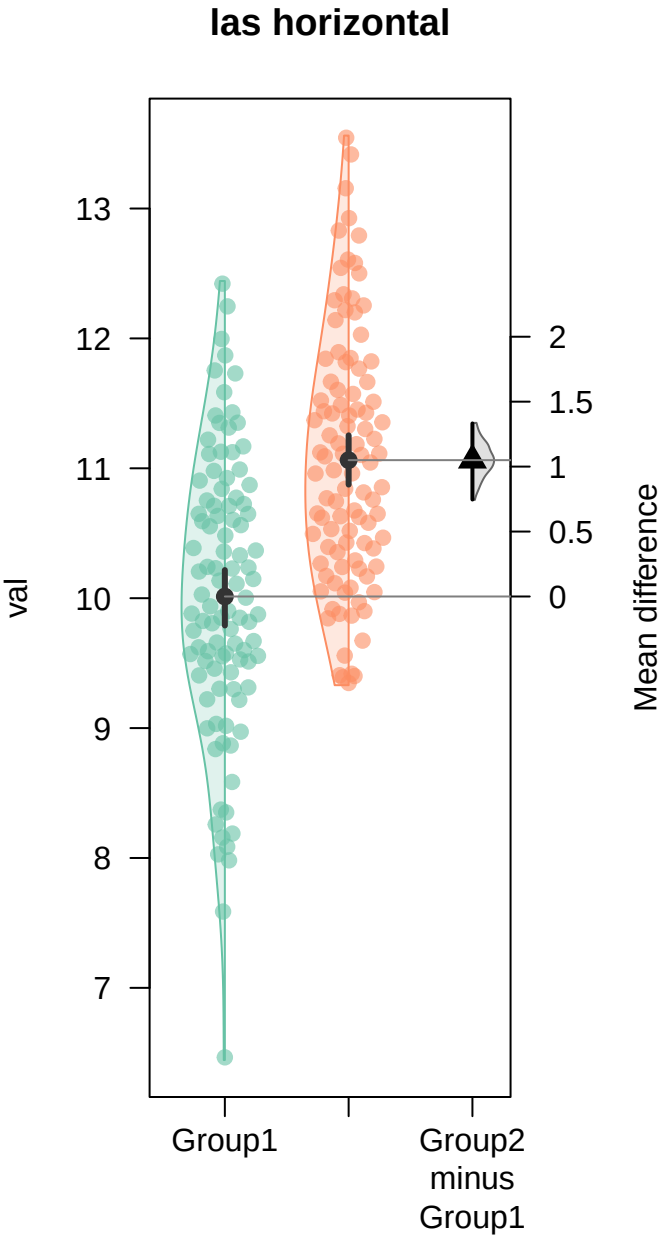

Paired, no violin, effect size, no points
Measurement
160
140
120
100
80
60
40
0
−20
−40
Mean difference
Group1
ZControl1
minus
Group1

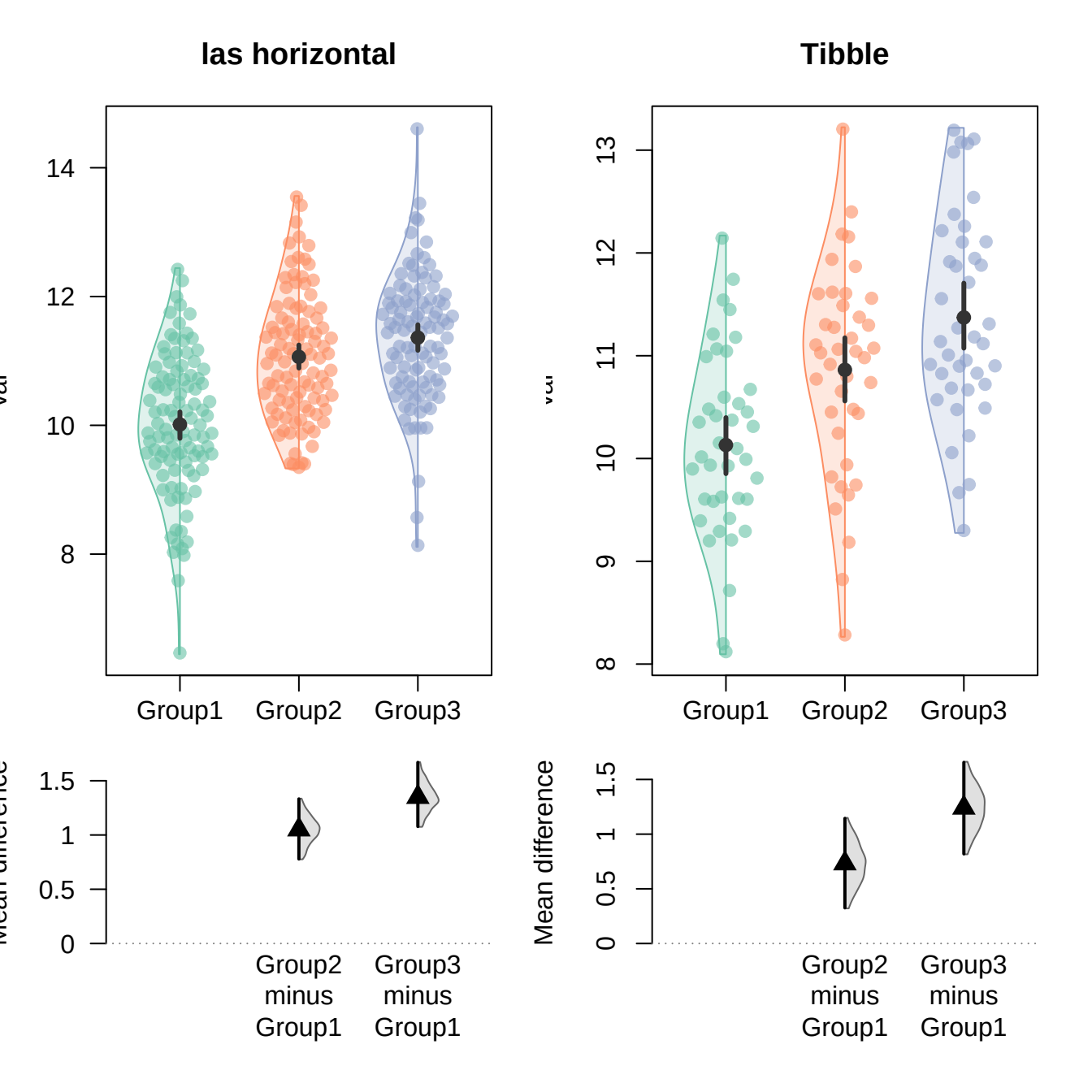

Custom
Measurement
160
140
120
100
80
60
40
0
−20
−40
Group1
ZControl1
minus
Group1
No intersecting lines?
Mean difference
Value
4
3
2
1
0
−1
Control
After

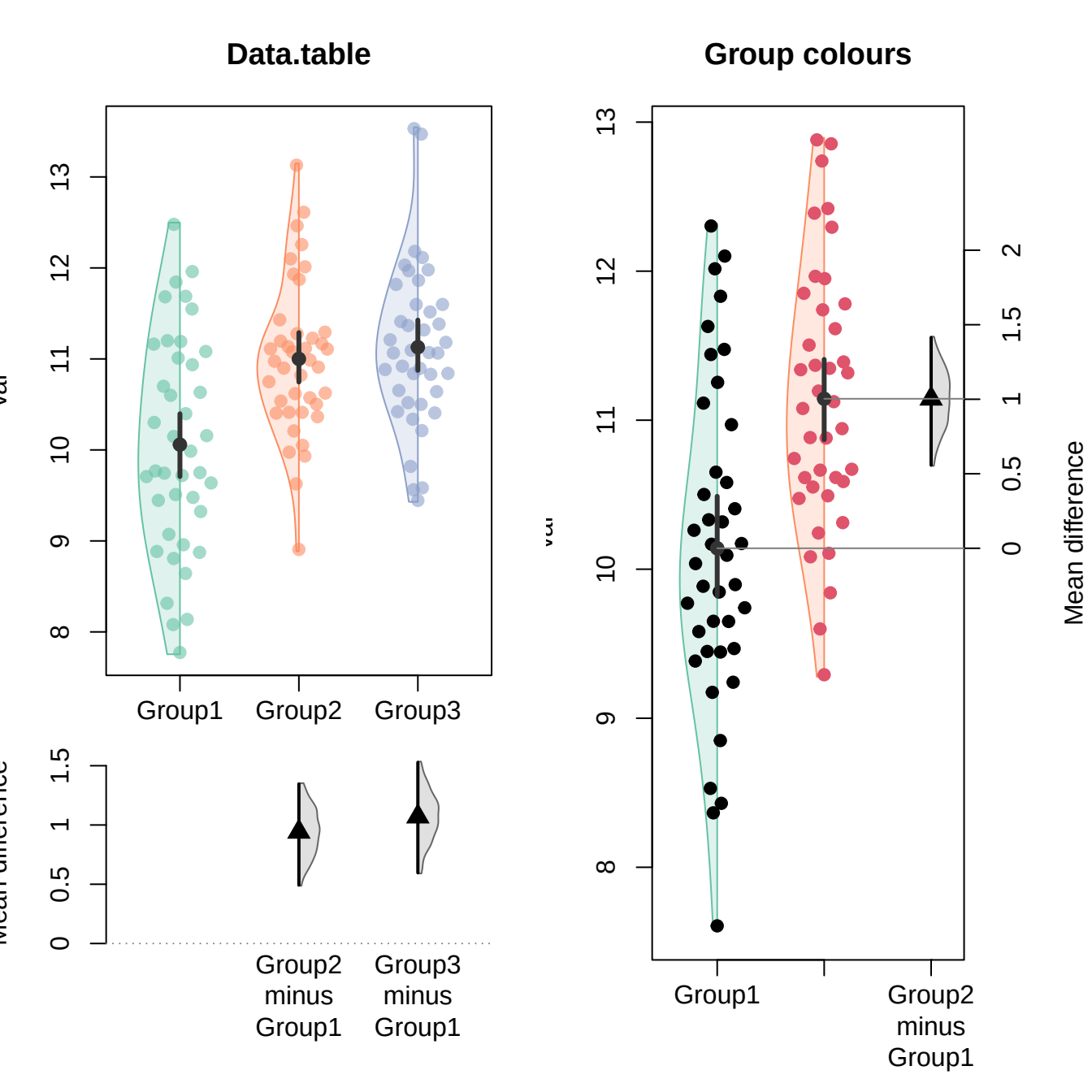

Paired with reversed groups
Paired with some NAs
Measurement
40
60
80
100
120
140
160
ZControl1
Group1
Group1
ZControl1

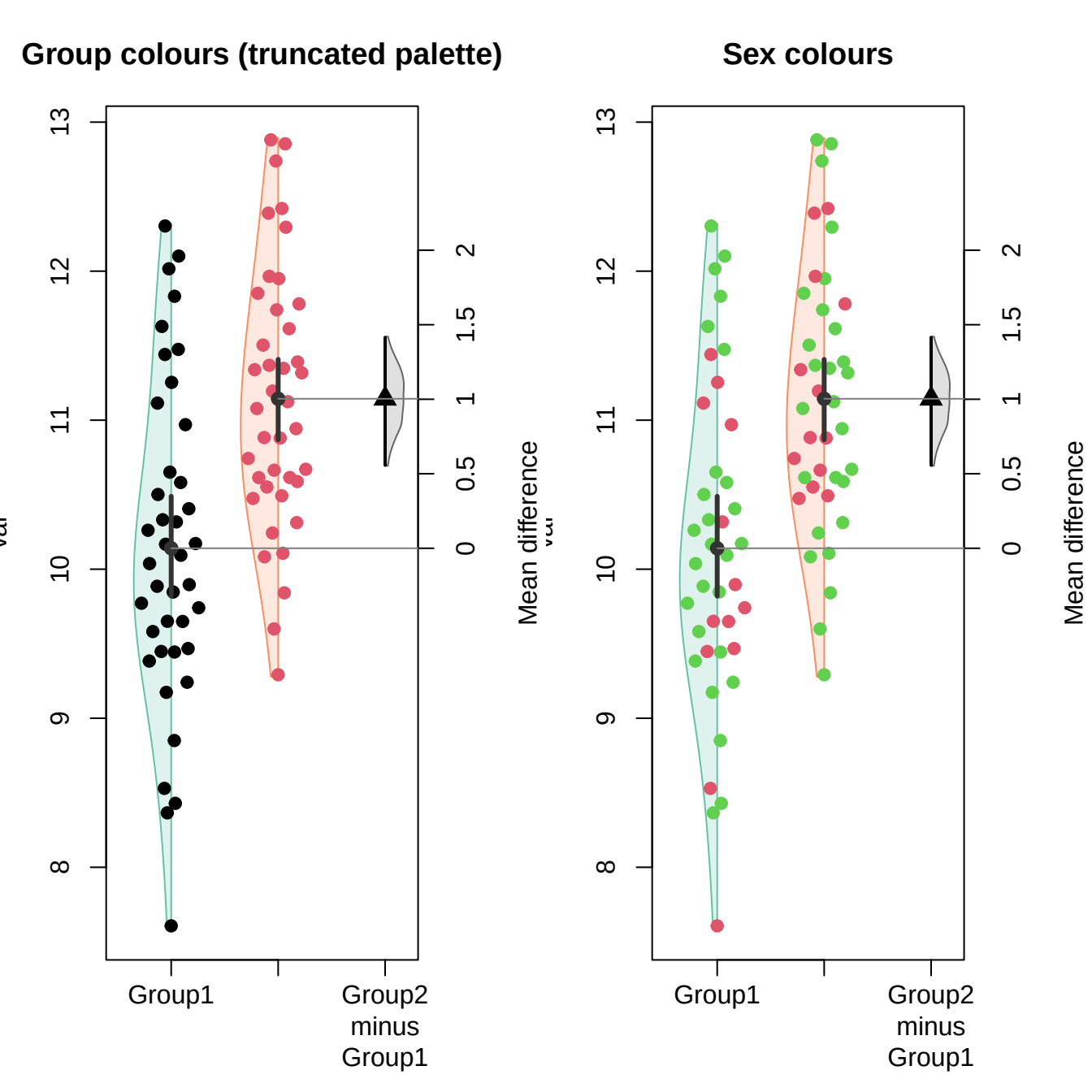
Bar chart, no error bars
Measurement
0
20
40
60
80
100
120
Group1
ZControl1
Bar chart, error bars
Measurement
0
20
40
60
80
100
120
Group1
ZControl1

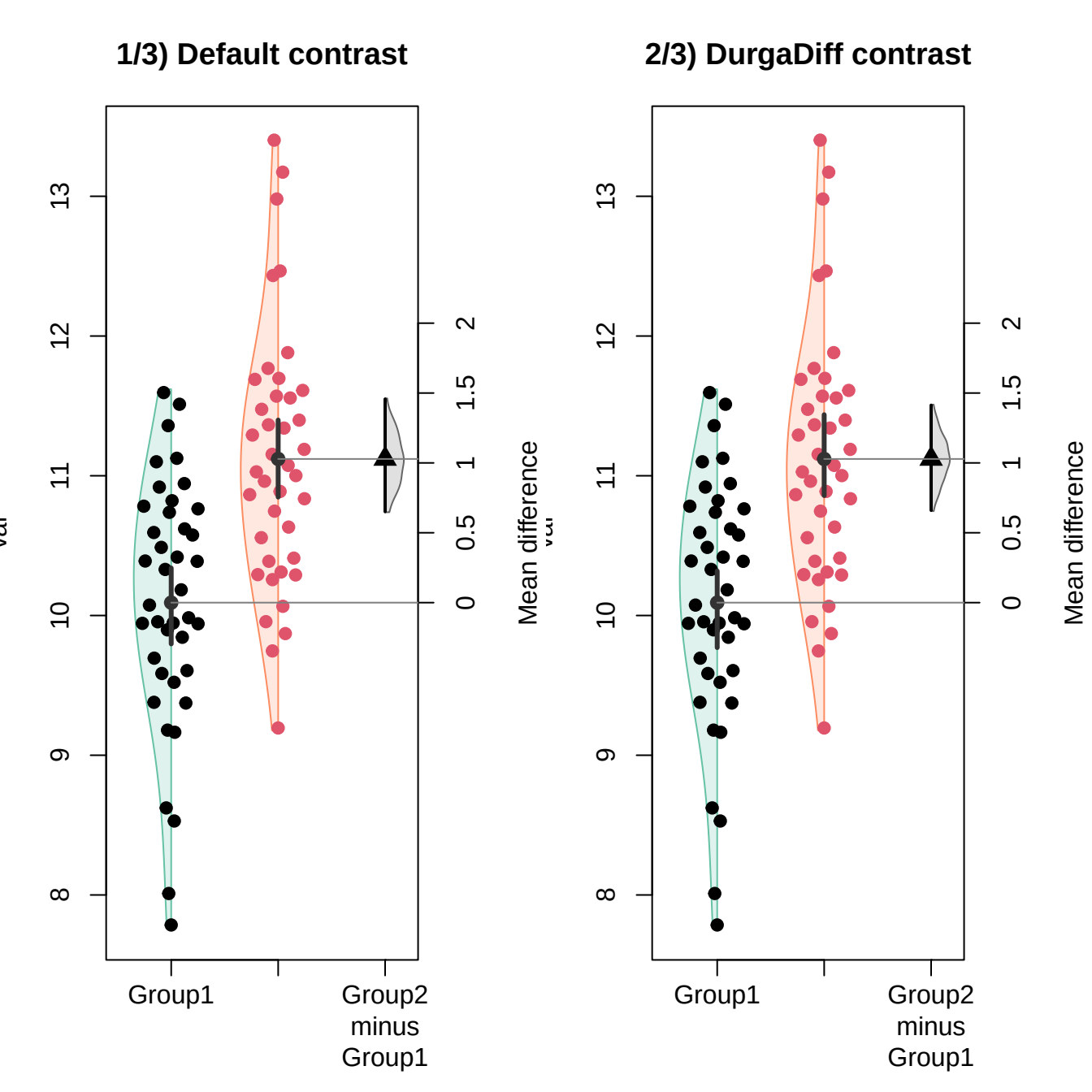

ohen's with custom labels
val
13
12
11
10
9
8
Large positive effect
Medium positive effect
Small positive effect
No effect
Small negative effect
Medium negative effect
Large negative effect
Control
Group
minus
Control

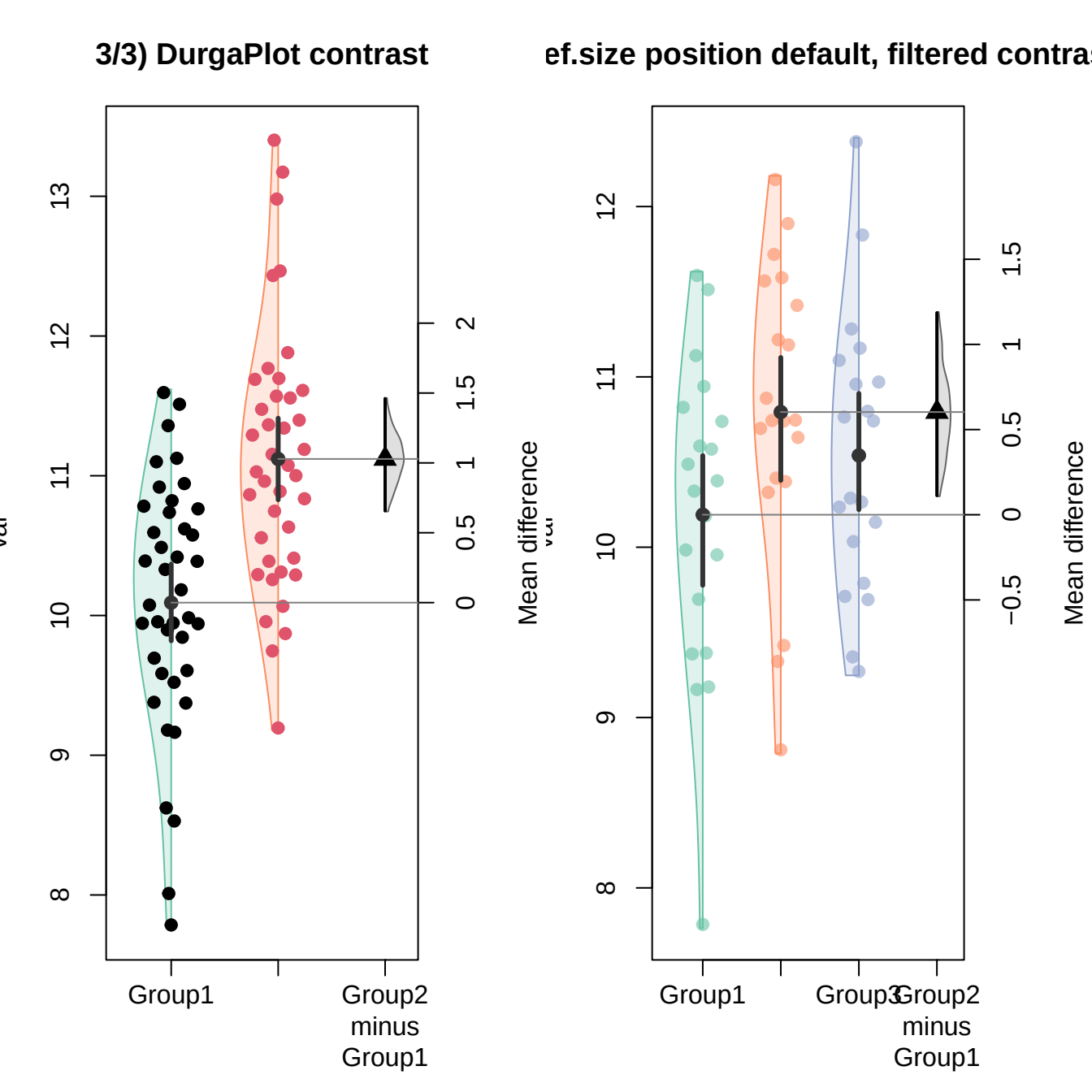

las horizontal
val
13
12
11
10
9
8
7
2
1.5
1
0.5
0
Mean difference
Group1
Group2
minus
Group1

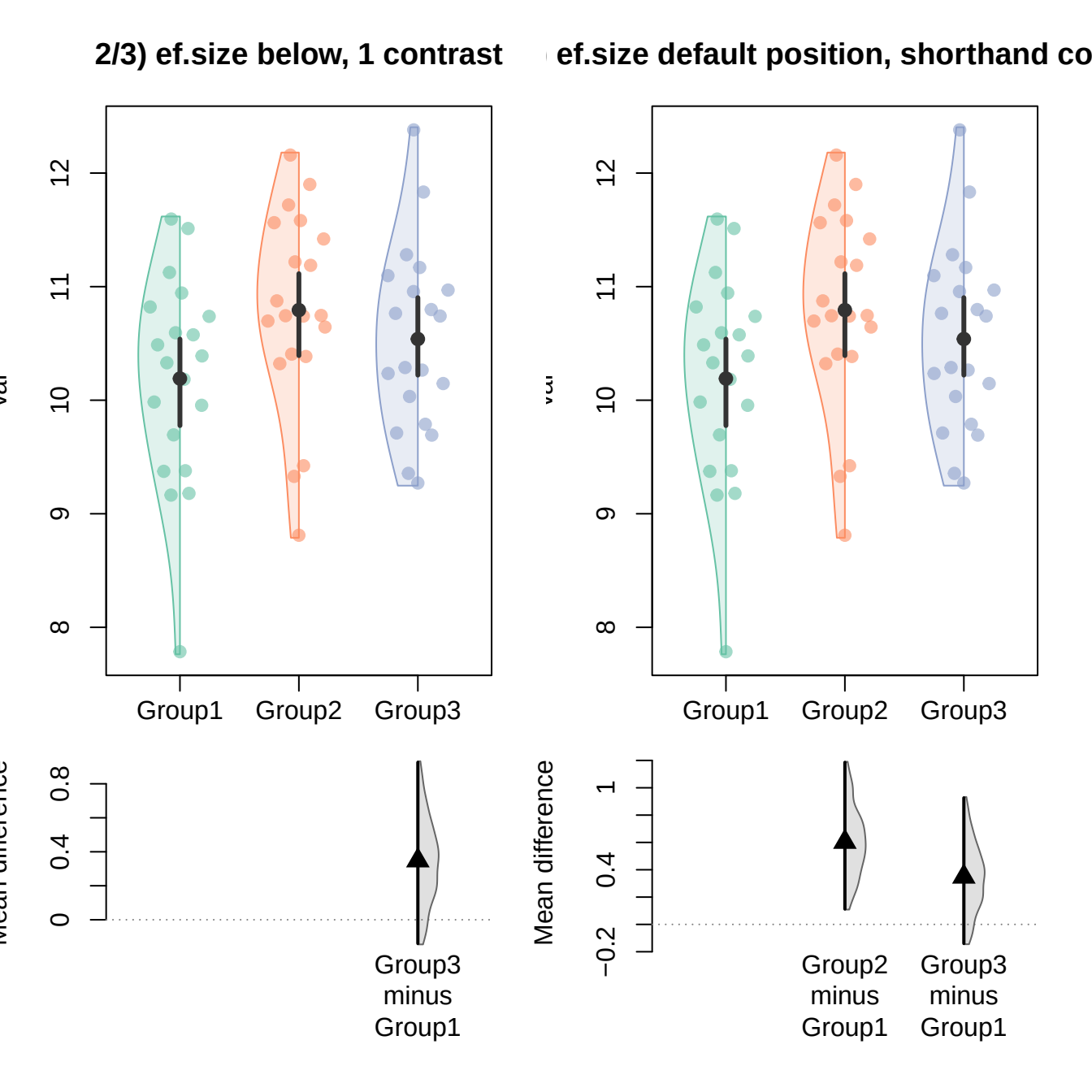

las horizontal
Tibble
14
12
10
8
13
11
9
Group1
Group2
Group3
1.5
1
0.5
0
Mean difference
Group2
minus
Group1
Group3
minus
Group1

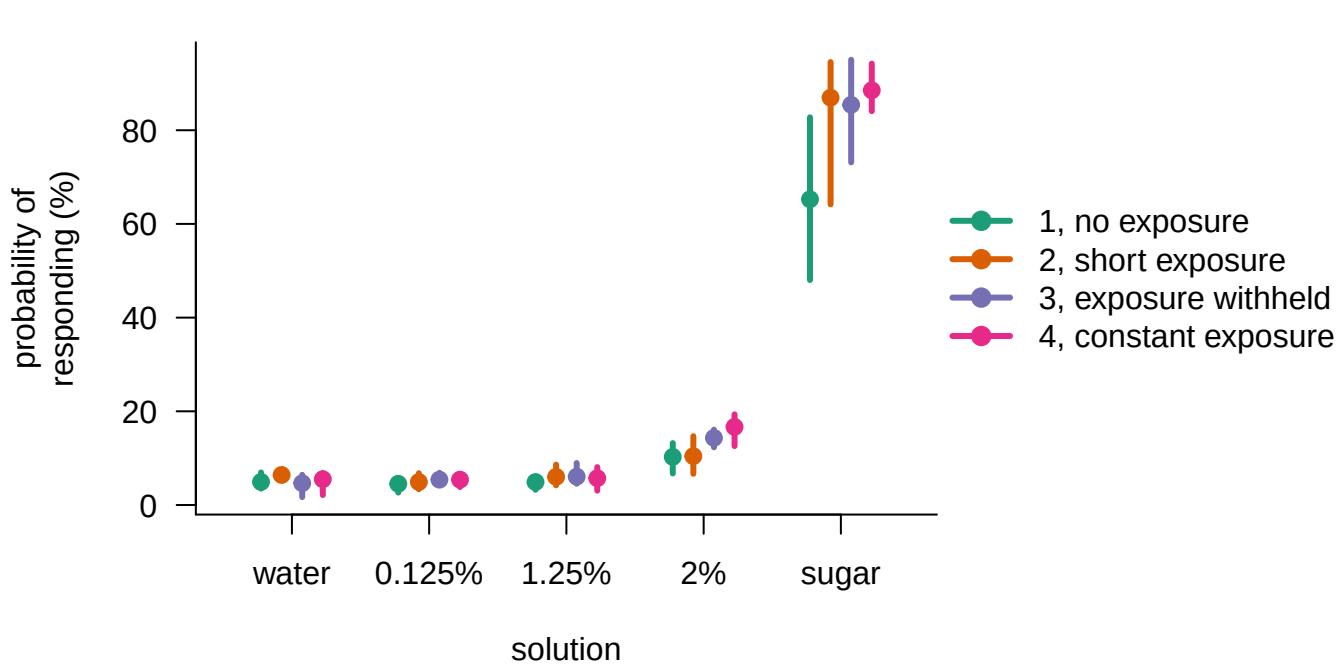

Data.table
Group colours
val
Mean difference
8
9
10
11
12
13
0
0.5
1
1.5
2
Group1
Group2
Group3
Group2
minus
Group1
Group3
minus
Group1

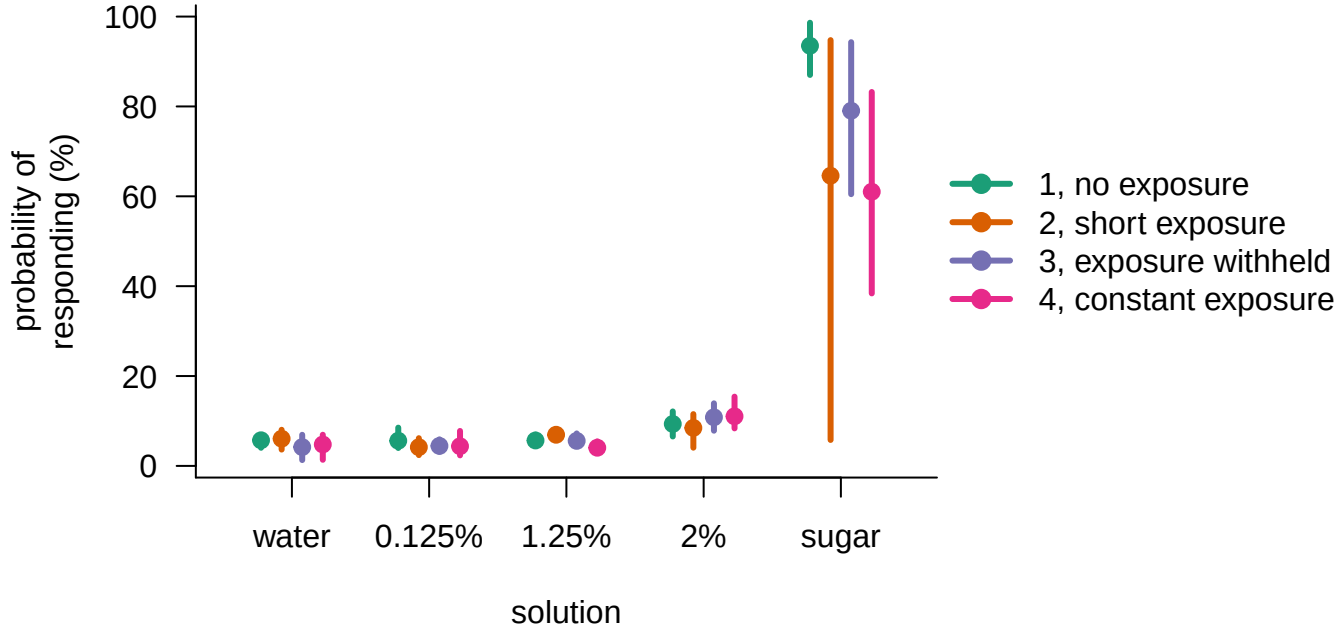

Group colours (truncated palette)
Sex colours
13
12
11
10
9
8
2
1.5
1
0.5
0
Mean difference
Group1
Group2
minus
Group1

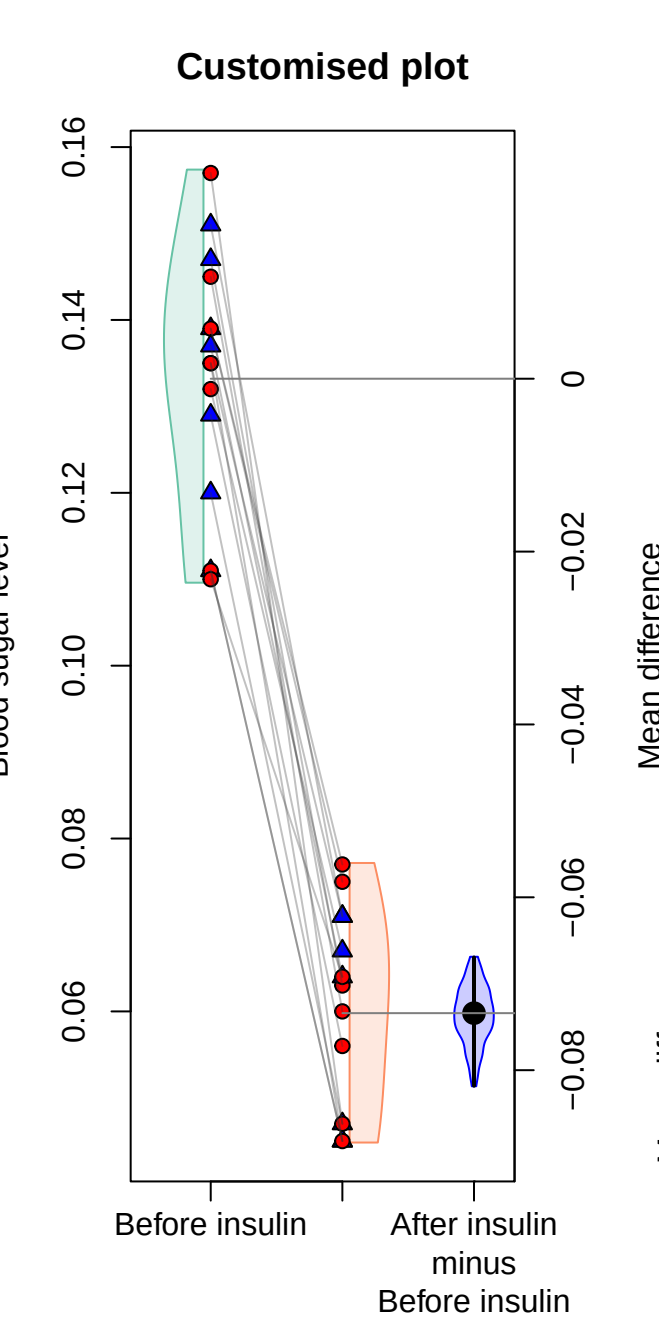

1/3) Default contrast
2/3) DurgaDiff contrast
13
12
11
10
9
8
2
1.5
1
0.5
0
Mean difference
Group1
Group2
minus
Group1

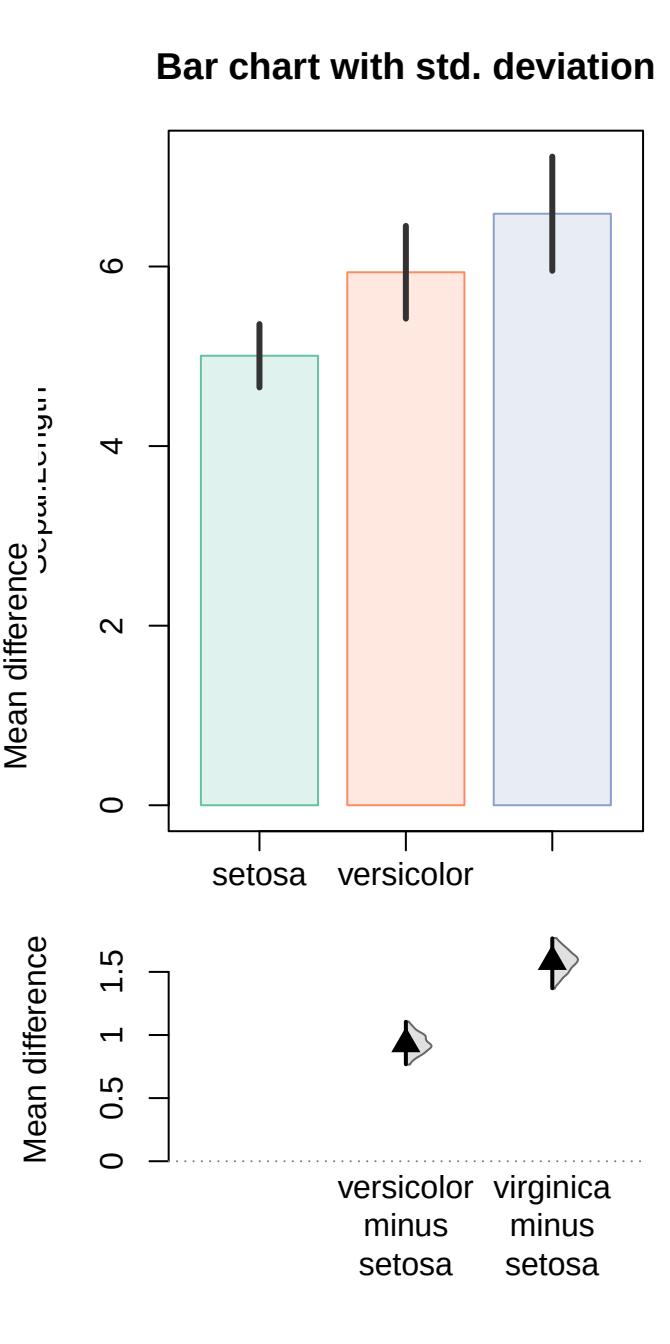

3/3) DurgaPlot contrast
ef.size position default, filtered contra
Mean difference
Mean difference
Group1
Group2
minus
Group1
Group1
Group3
Group2
minus
Group1

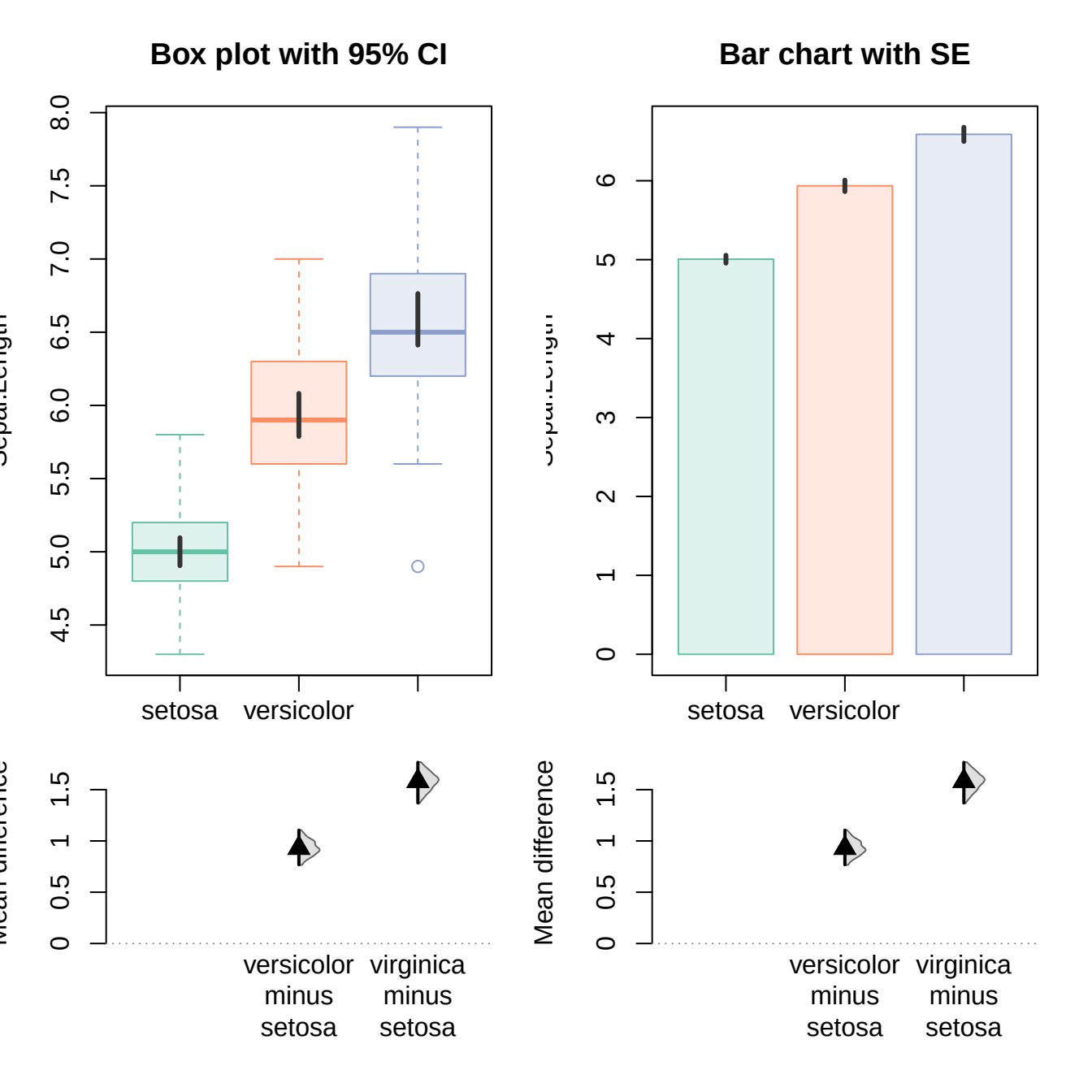

2/3) ef.size below, 1 contrast
ef.size default position, shorthand co
12
11
10
9
8
Group1
Group2
Group3
0
0.4
0.8
Group3
minus
Group1
Mean difference
1
0.4
−0.2
Group2
minus
Group1
Group3
minus
Group1

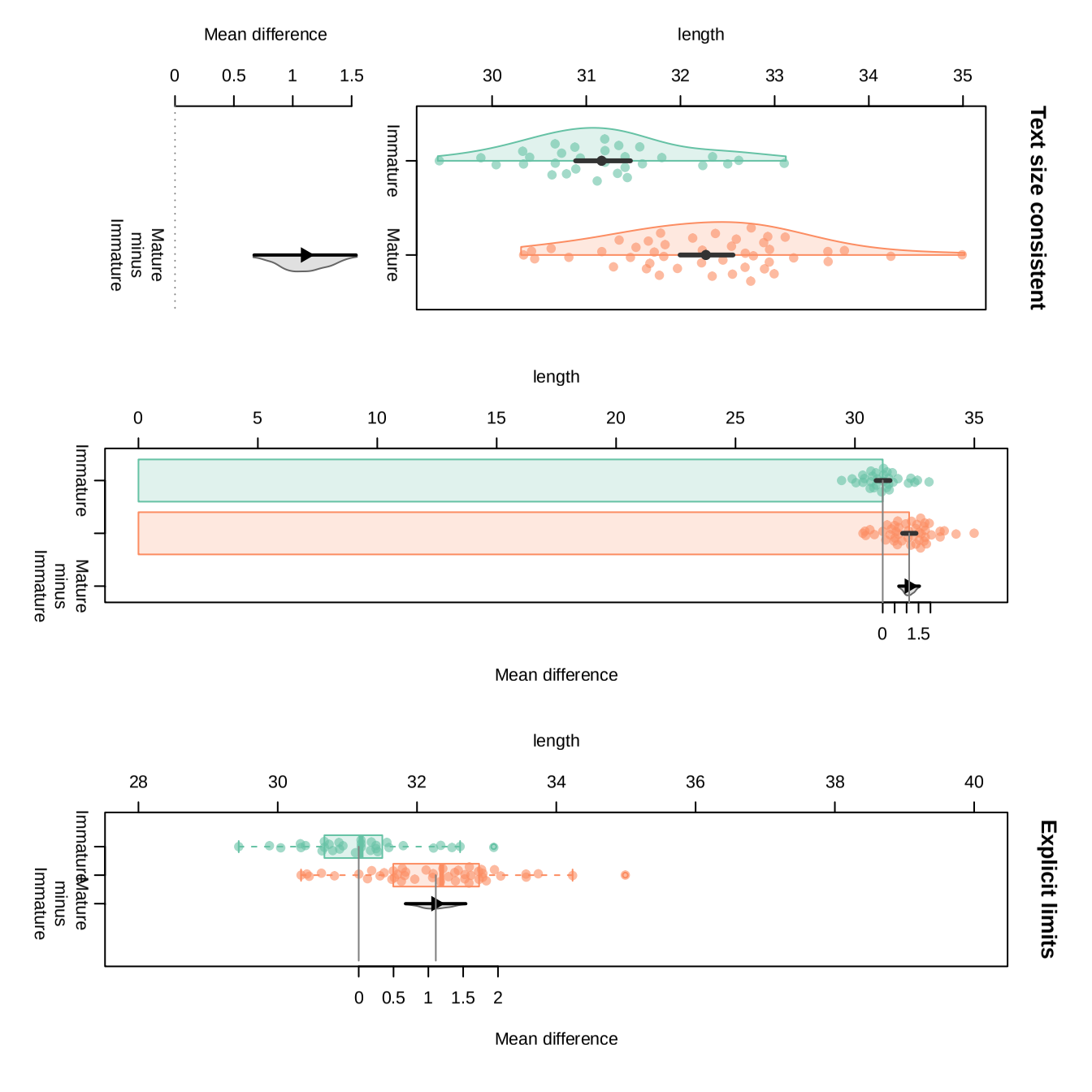

probability of responding (%)
0
20
40
60
80
water
0.125%
1.25%
2%
sugar
solution
1, no exposure
2, short exposure
3, exposure withheld
4, constant exposure

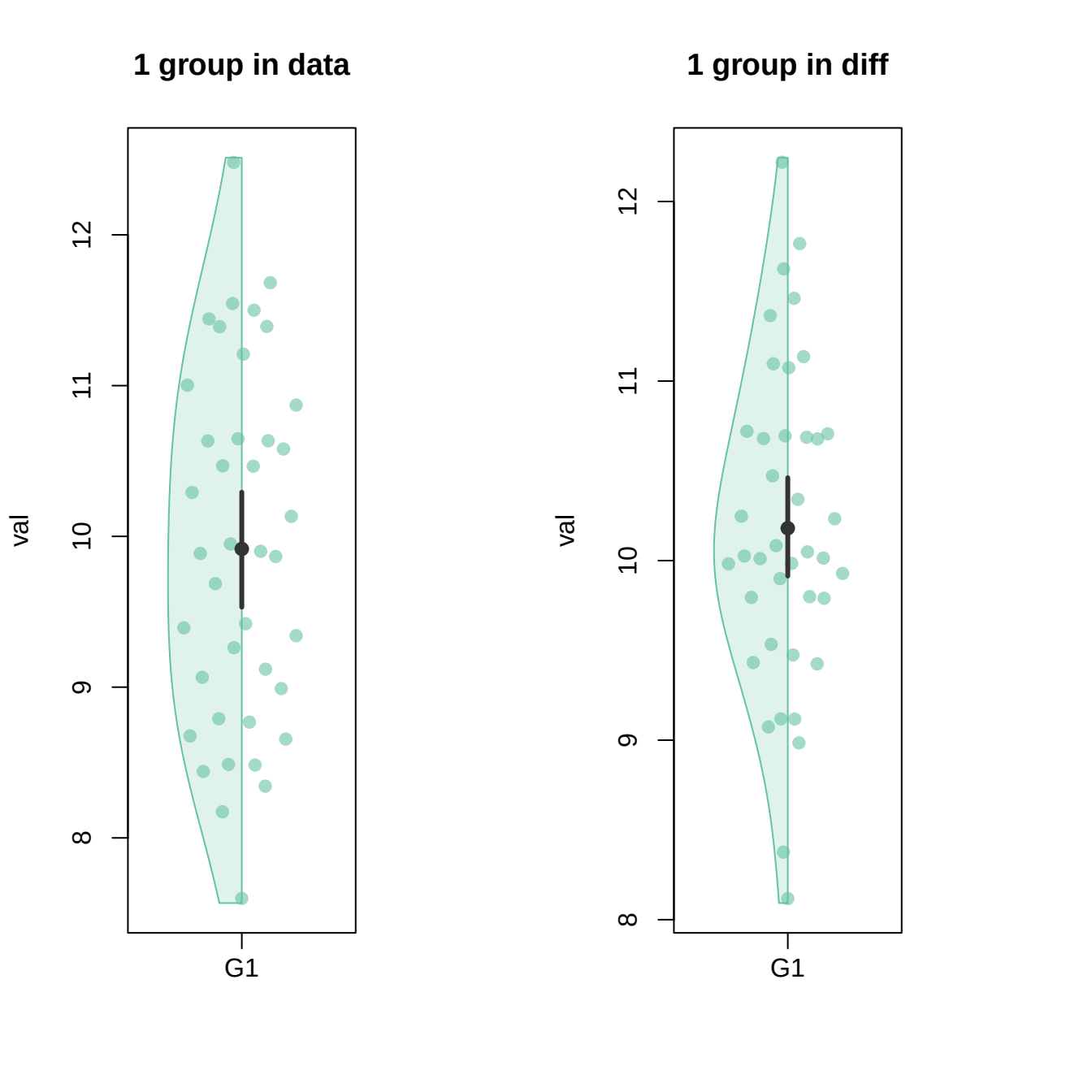

probability of responding (%)
0
20
40
60
80
100
water
0.125%
1.25%
2%
sugar
solution
1, no exposure
2, short exposure
3, exposure withheld
4, constant exposure

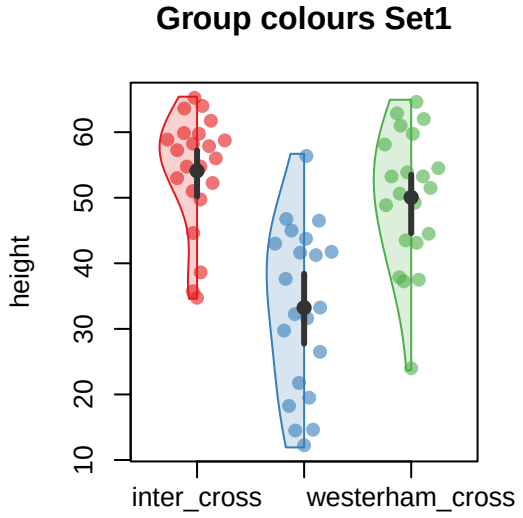

Customised plot
Blood sugar level
0.16
0.14
0.12
0.10
0.08
0.06
0
−0.02
−0.04
−0.06
−0.08
Before insulin
After insulin
minus
Before insulin

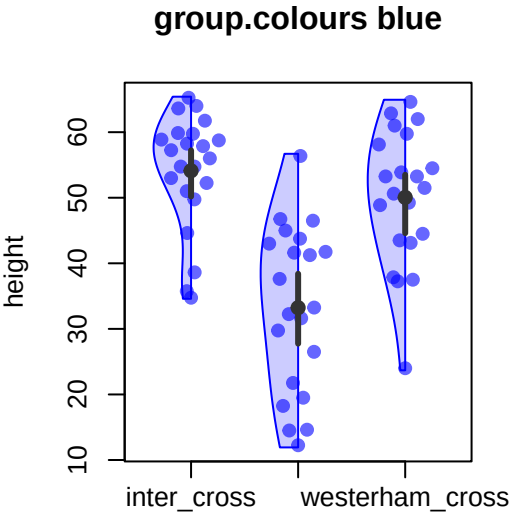

Bar chart with std. deviation
Mean difference
Sepal.Length
6
4
2
0
setosa
versicolor
Mean difference
1.5
1
0.5
0
versicolor
minus
setosa
virginica
minus
setosa

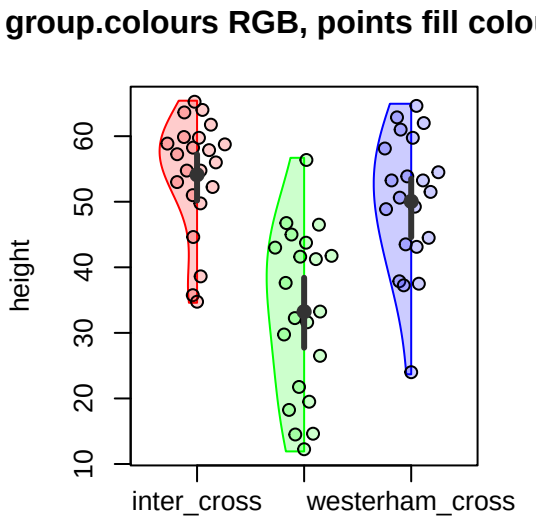

Box plot with 95% CI
Bar chart with SE
Sepal.Length
Mean difference
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
0
1
2
3
4
5
6
0
0.5
1
1.5
setosa
versicolor
versicolor minus setosa
virginica minus setosa

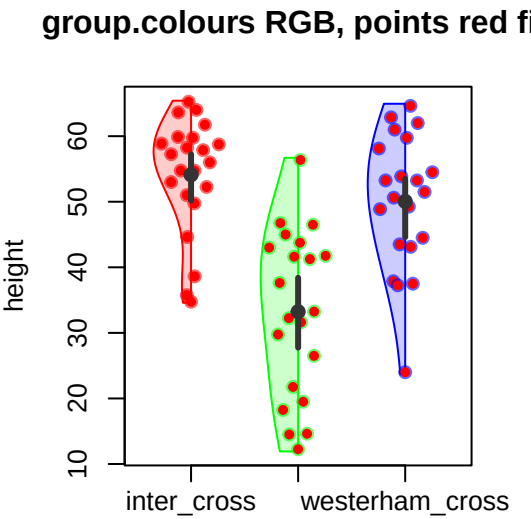

Text size consistent
Mean difference
0
0.5
1
1.5
Immature
Mature
minus
Immature
length
30
31
32
33
34
35
Immature
Mature
length
0
5
10
15
20
25
30
35
Immature
Mature
minus
Immature
0
1.5
Mean difference
length
28
30
32
34
36
38
40
Explicit limits
Immature
Mature
minus
Immature
0
0.5
1
1.5
2
Mean difference

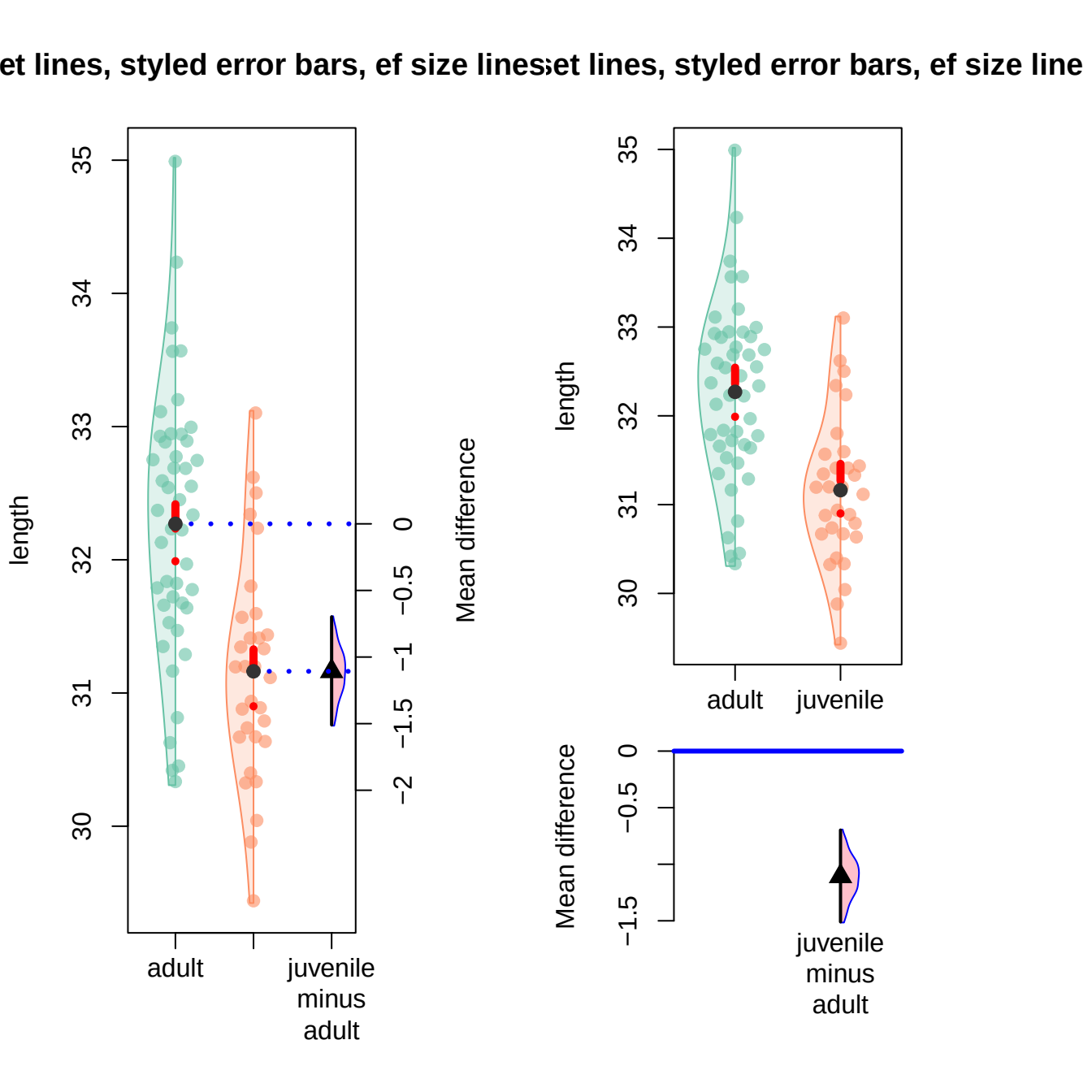

1 group in data
1 group in diff
val
8
9
10
11
12
G1

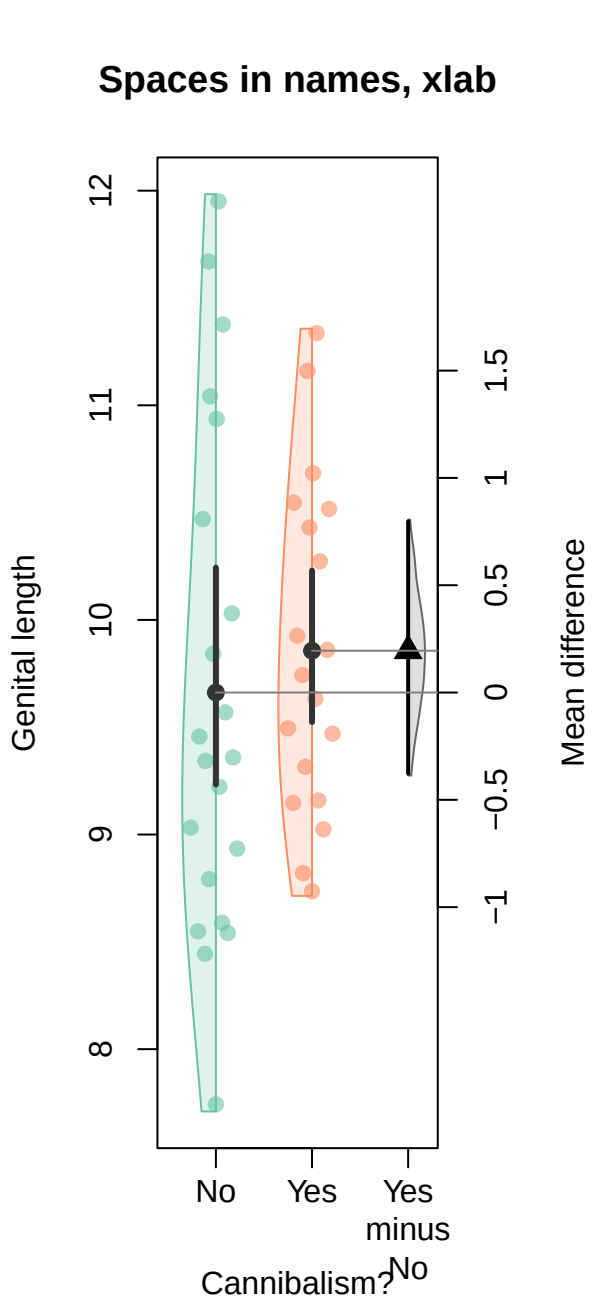

Group colours Set1
height
10
20
30
40
50
60
inter_cross
westerham_cross

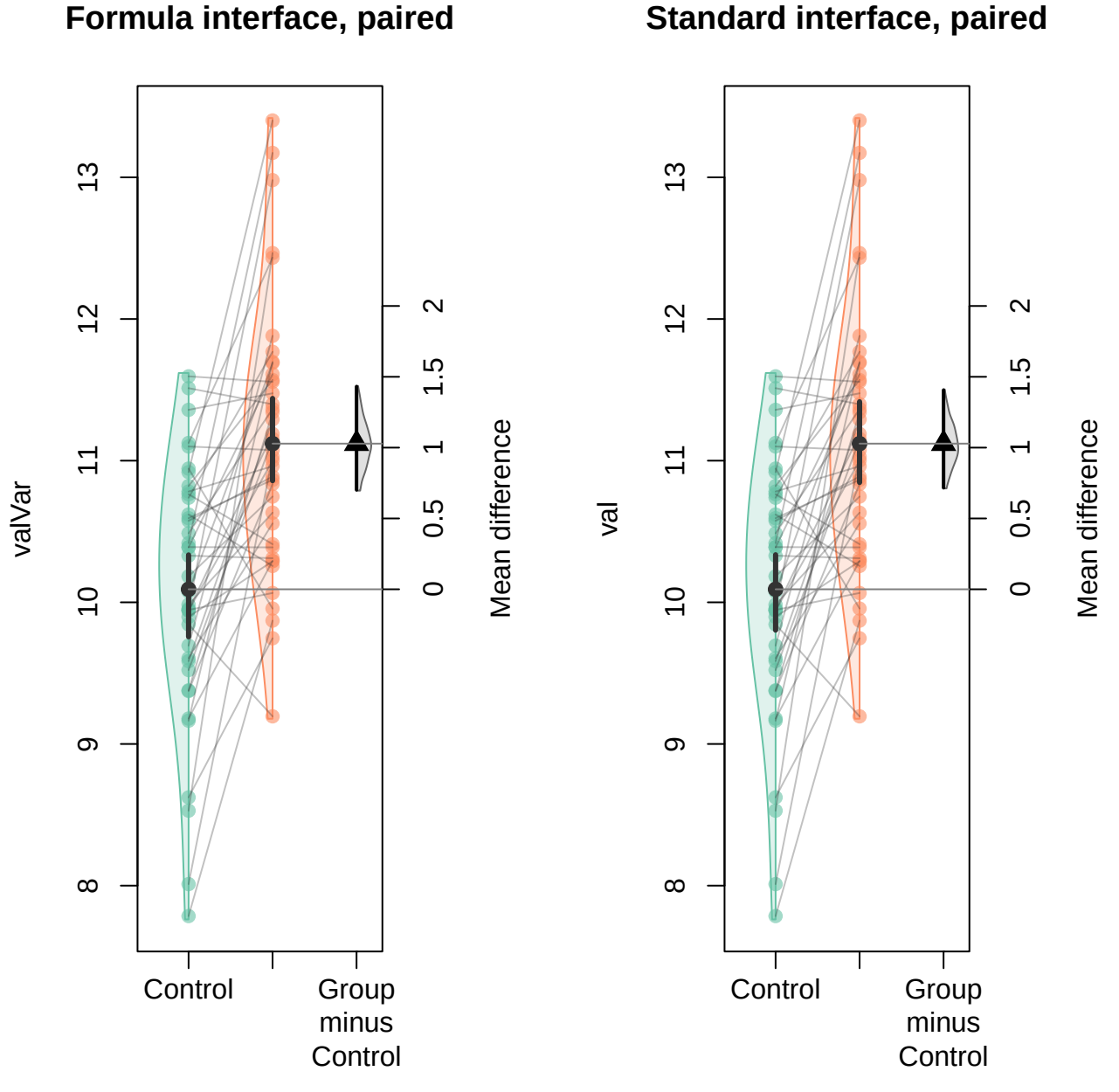

group.colours blue
height
10
20
30
40
50
60
inter_cross
westerham_cross

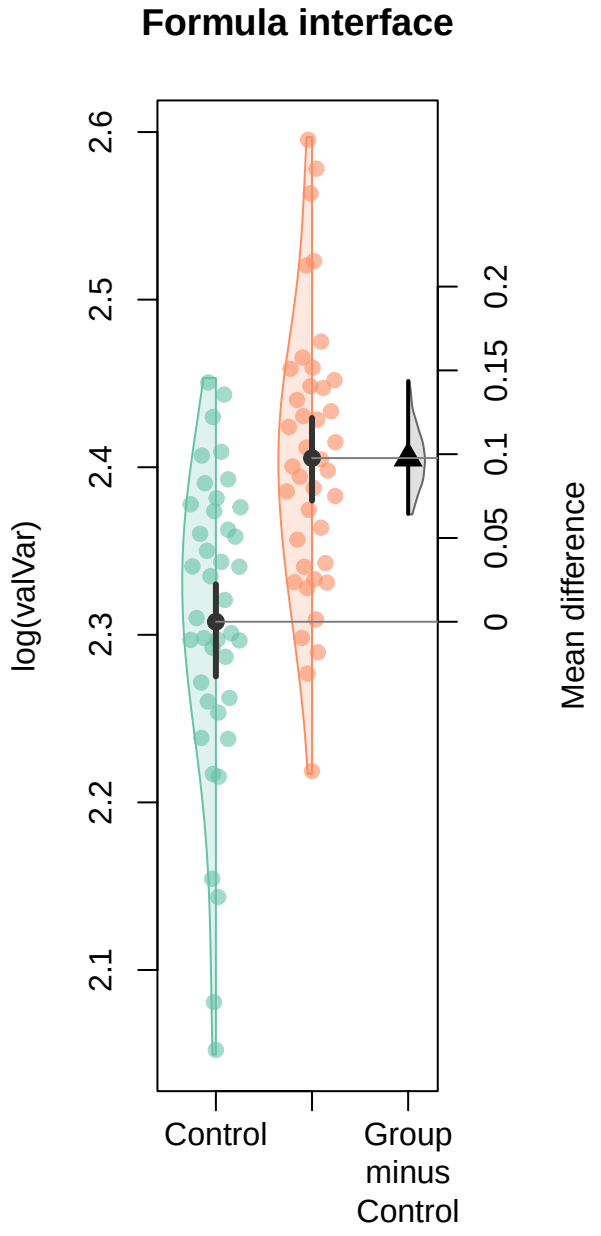

group.colours RGB, points fill coloured
height
10
20
30
40
50
60
inter_cross
westerham_cross

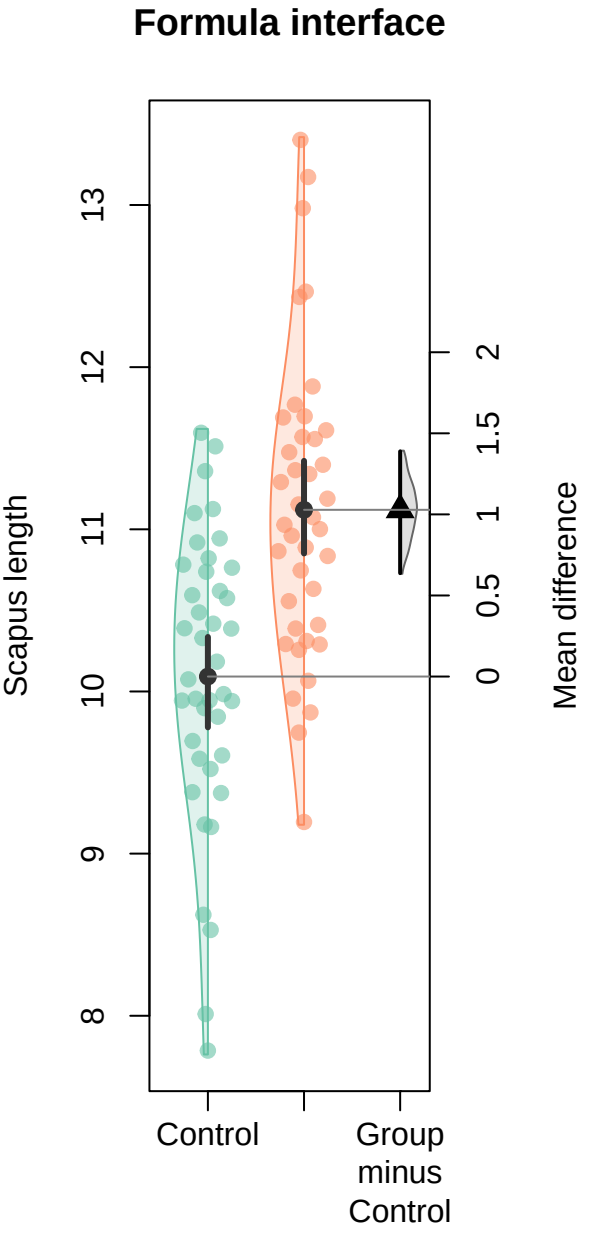

group.colours RGB, points red fill
height
10
20
30
40
50
60
inter_cross
westerham_cross

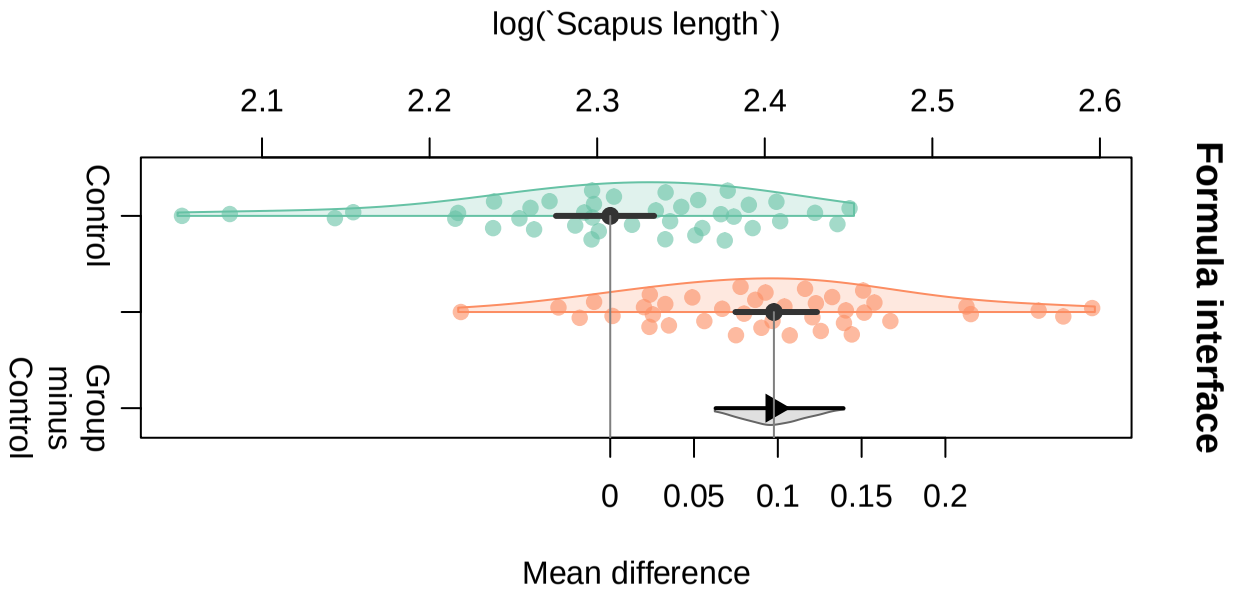

et lines, styled error bars, ef size lines
length
35
34
33
32
31
30
adult
juvenile
minus
adult
Mean difference
0
−0.5
−1
−1.5
−2
et lines, styled error bars, ef size line
length
35
34
33
32
31
30
adult
juvenile
Mean difference
0
−0.5
−1.5
juvenile
minus
adult

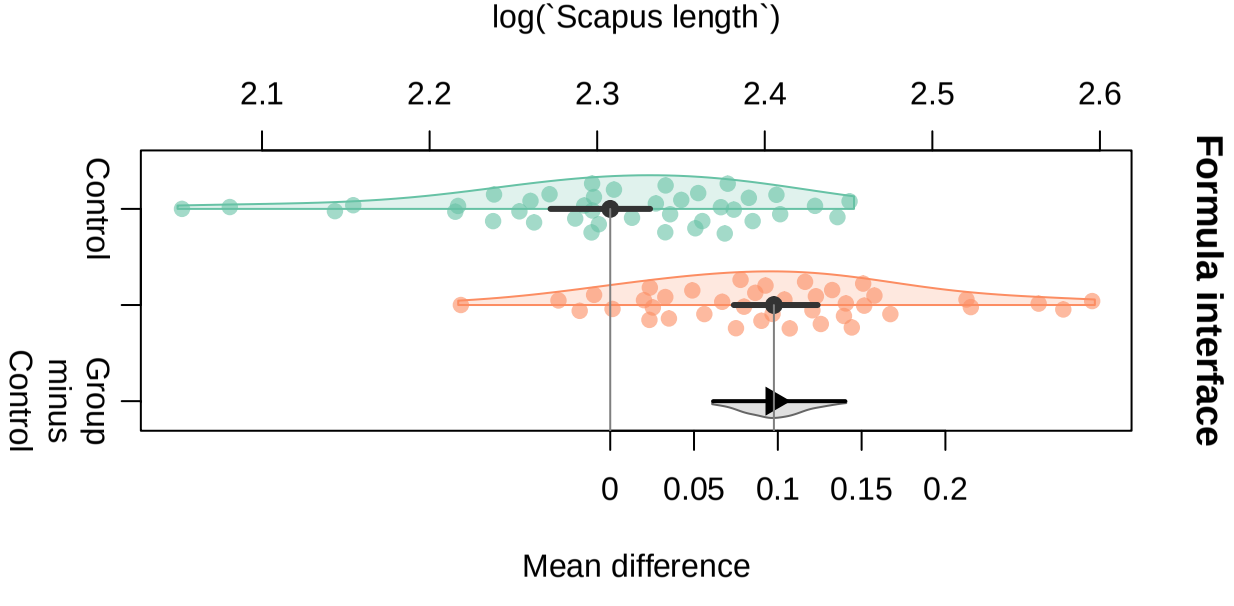

Spaces in names, xlab
Genital length
12
11
10
9
8
Mean difference
1.5
1
0.5
0
−0.5
−1
No
Yes
Yes minus No
Cannibalism?

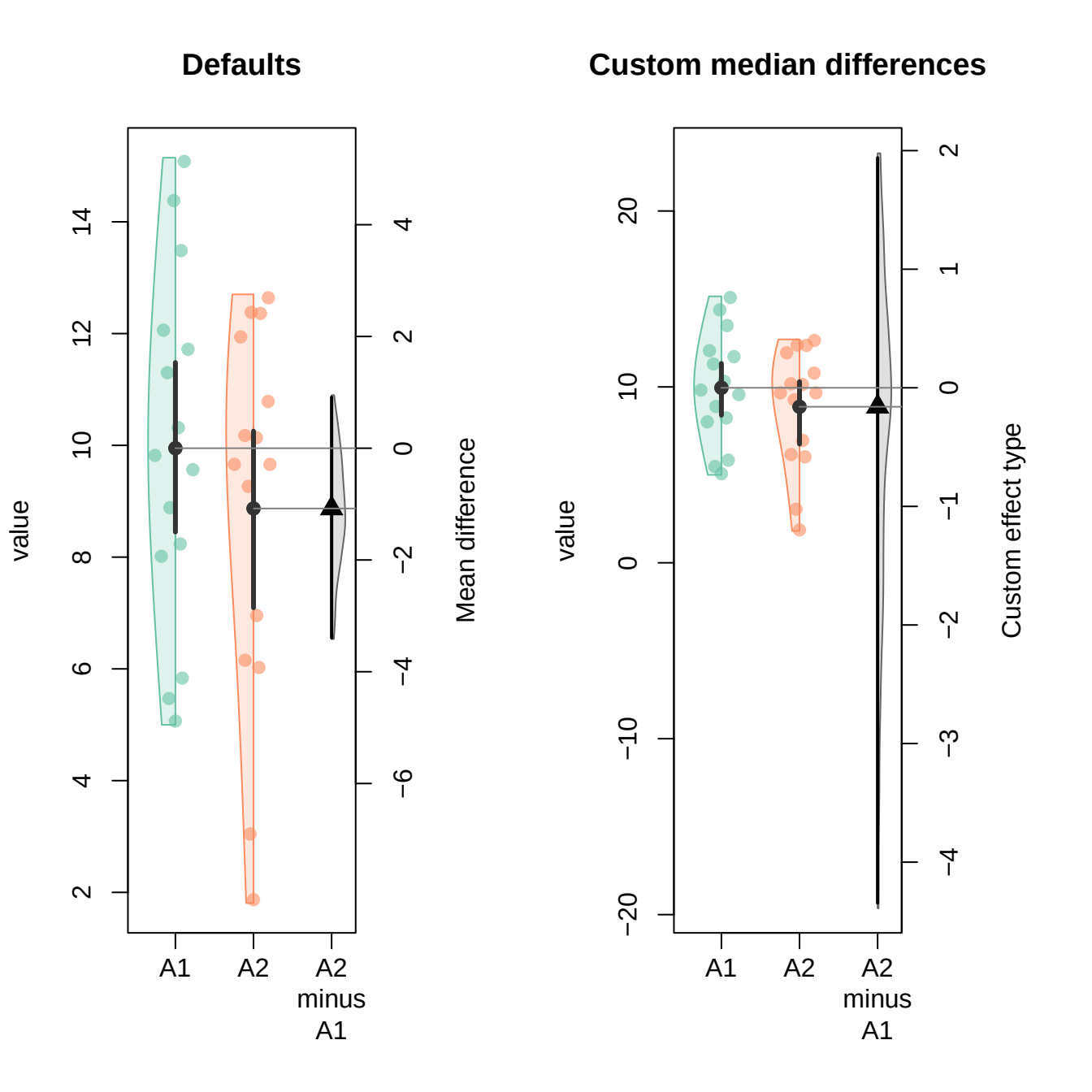

Formula interface, paired
valVar
13
12
11
10
9
8
2
1.5
1
0.5
0
Mean difference
Control
Group
minus
Control
Standard interface, paired
val
13
12
11
10
9
8
2
1.5
1
0.5
0
Mean difference
Control
Group
minus
Control

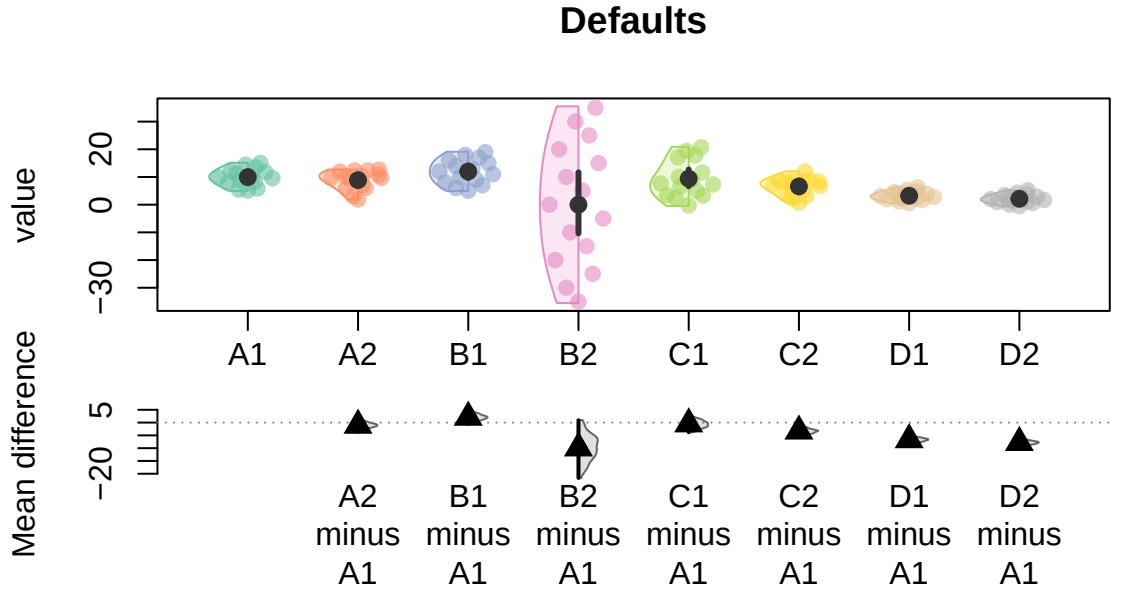

Formula interface
log(valVar)
2.6
2.5
2.4
2.3
2.2
2.1
0.2
0.15
0.1
0.05
0
Mean difference
Control
Group
minus
Control

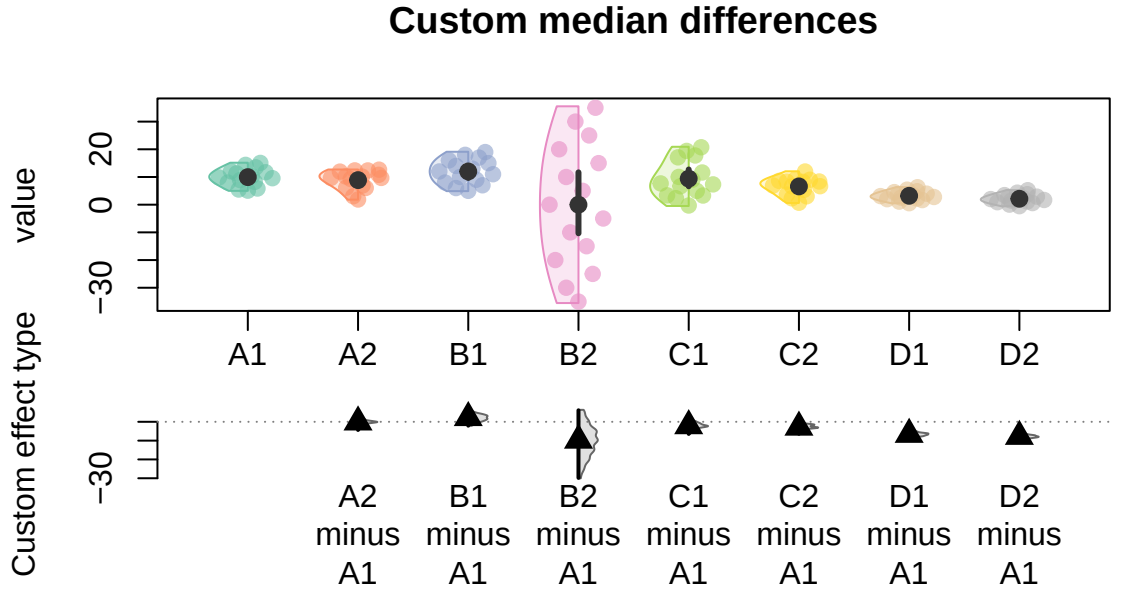

Formula interface
Scapus length
13
12
11
10
9
8
2
1.5
1
0.5
0
Mean difference
Control
Group
minus
Control


log(`Scapus length`)
2.1
2.2
2.3
2.4
2.5
2.6
Control
Group
Control
minus
Control
0
0.05
0.1
0.15
0.2
Mean difference
Formula interface


log(`Scapus length`)
2.1
2.2
2.3
2.4
2.5
2.6
Control
Group
Control
minus
Control
0
0.05
0.1
0.15
0.2
Mean difference
Formula interface

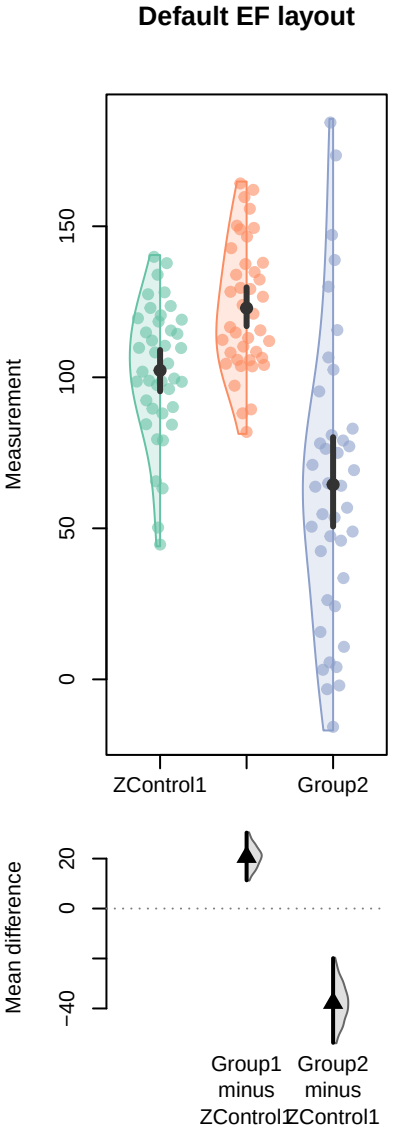

Defaults
value
Mean difference
A1
A2
A2 minus A1
Custom median differences
value
Custom effect type
A1
A2
A2 minus A1

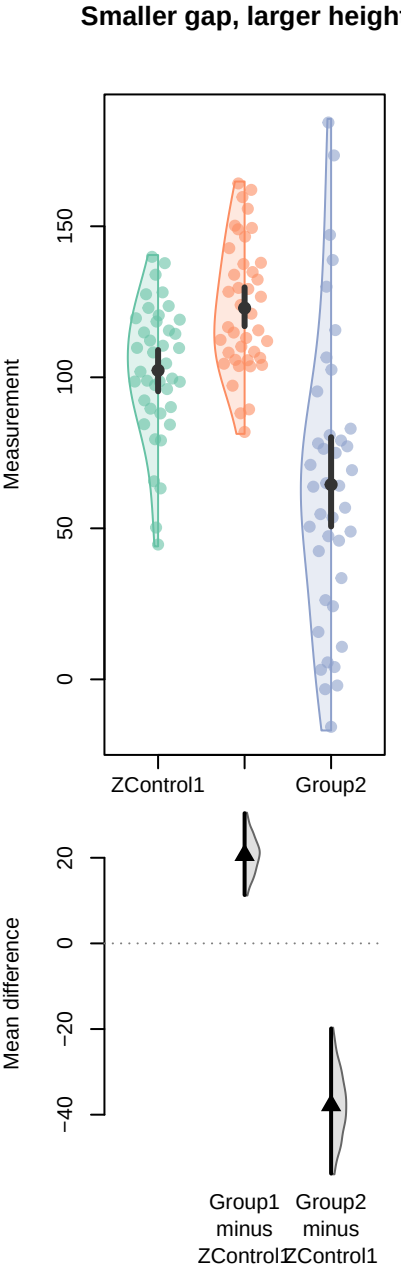

Defaults
value
20
0
−30
A1
A2
B1
B2
C1
C2
D1
D2
Mean difference
5
−20
A2 minus A1
B1 minus A1
B2 minus A1
C1 minus A1
C2 minus A1
D1 minus A1
D2 minus A1

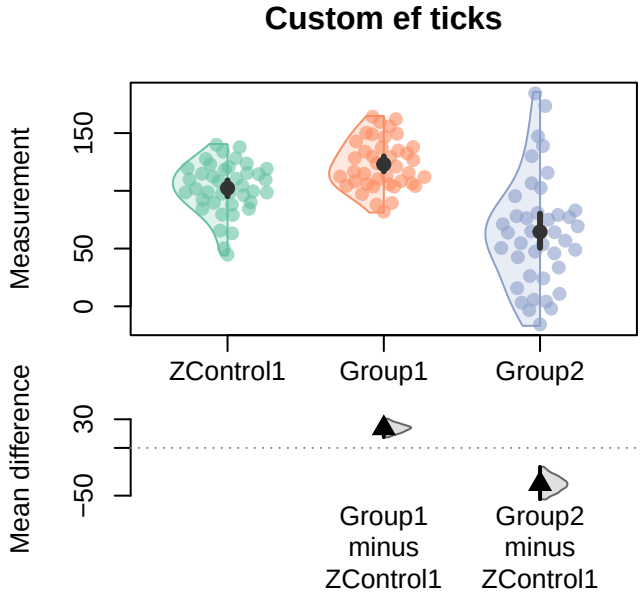

Custom median differences
value
20
0
−30
A1
A2
B1
B2
C1
C2
D1
D2
Custom effect type
−30
A2 minus A1
B1 minus A1
B2 minus A1
C1 minus A1
C2 minus A1
D1 minus A1
D2 minus A1

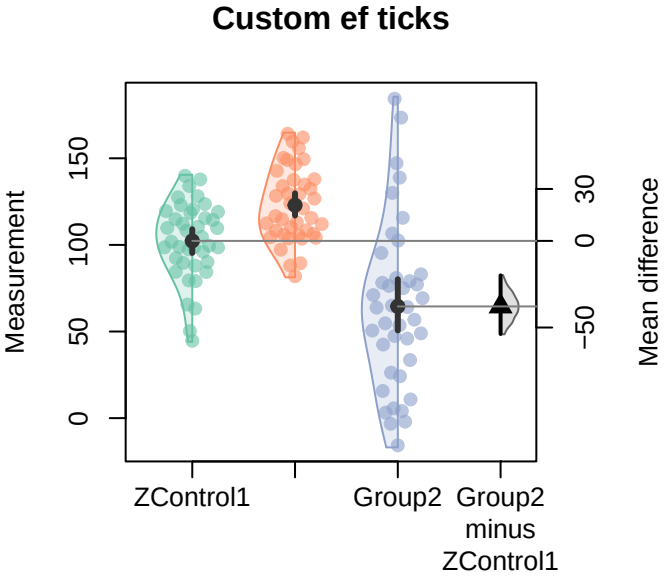
Measurement
0
50
100
150
Bold name
−40
0
Group1
minus
ZControl1
Sp. 1 − Sp. 2

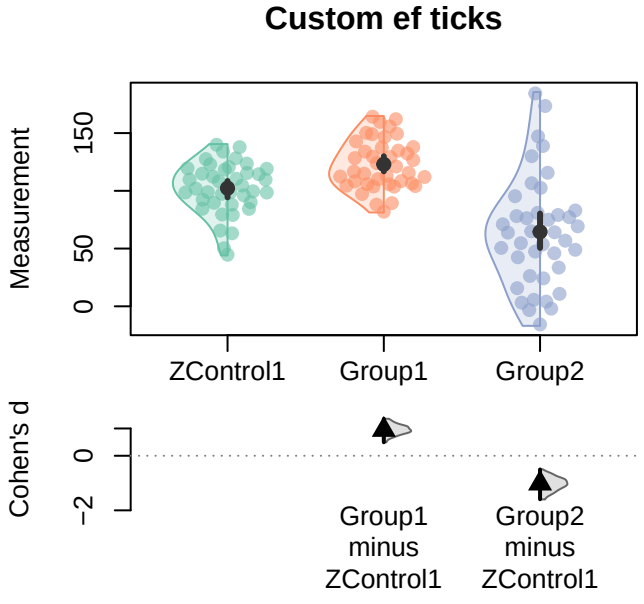
Effect size ylim correct
proportion
0.1
0.2
0.3
0.4
0.5
0.6
Spring
Autumn
Mean difference
−0.5
−0.2
0
Spring
minus
Winter
Summer
minus
Winter
Autumn
minus
Winter

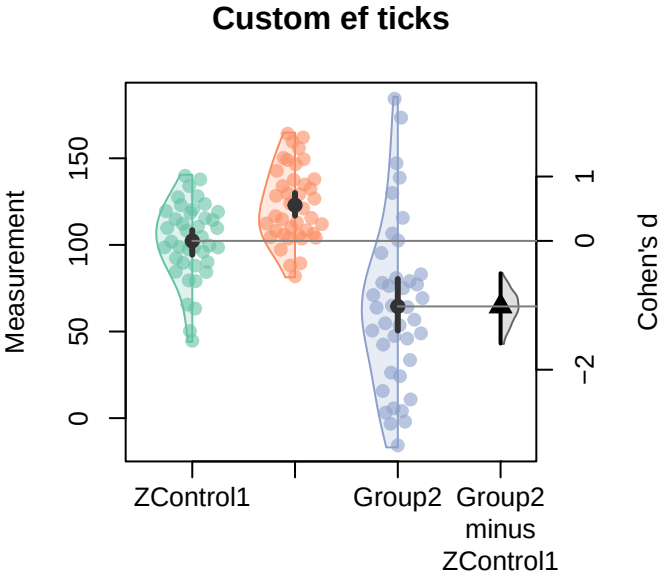

Default EF layout
Measurement
150
100
50
0
ZControl1
Group2
Mean difference
20
0
−40
Group1
minus
ZControl1
Group2
minus
ZControl1

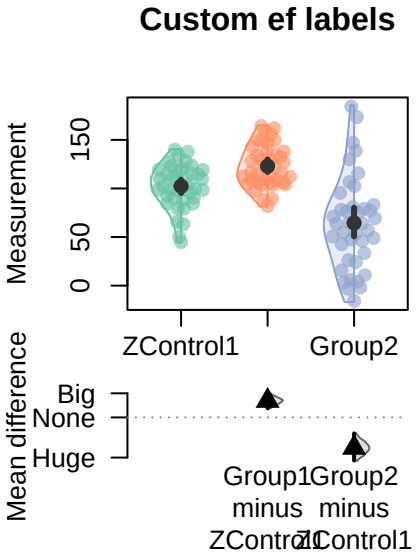

Smaller gap, larger height
Measurement
150
100
50
0
ZControl1
Group2
Mean difference
20
0
−20
−40
Group1
minus
ZControl1
Group2
minus
ZControl1

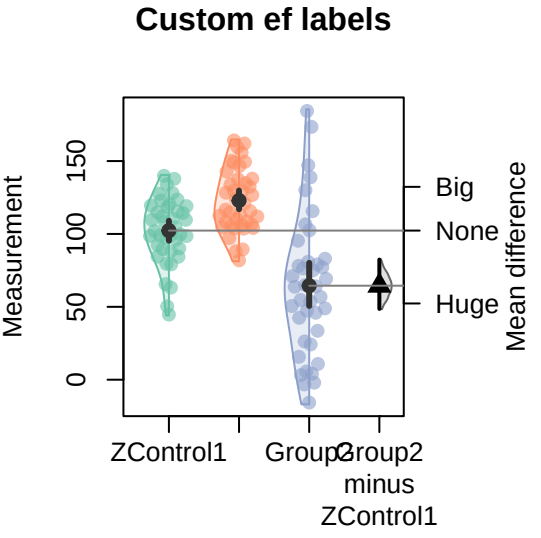

Custom ef ticks
Measurement
150
50
0
ZControl1
Group1
Group2
Mean difference
30
−50
Group1
minus
ZControl1
Group2
minus
ZControl1

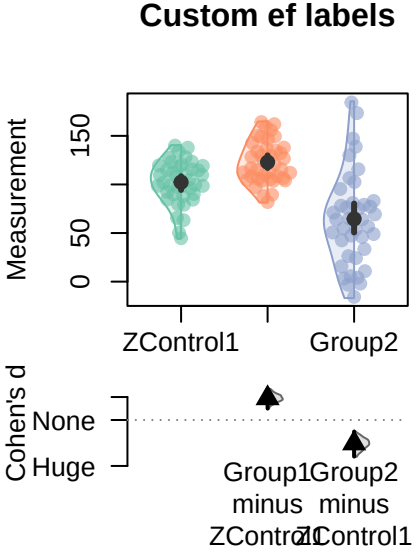

Custom ef ticks
Measurement
150
100
50
0
ZControl1
Group2
Group2
minus
ZControl1
30
0
−50
Mean difference

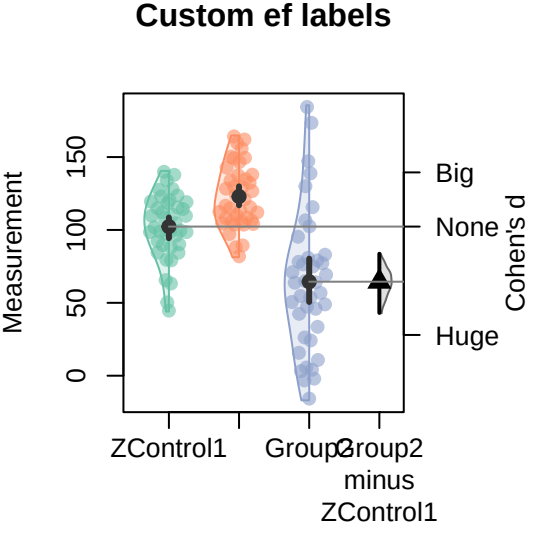

Custom ef ticks
Measurement
150
50
0
ZControl1
Group1
Group2
Cohen's d
0
−2
Group1
minus
ZControl1
Group2
minus
ZControl1

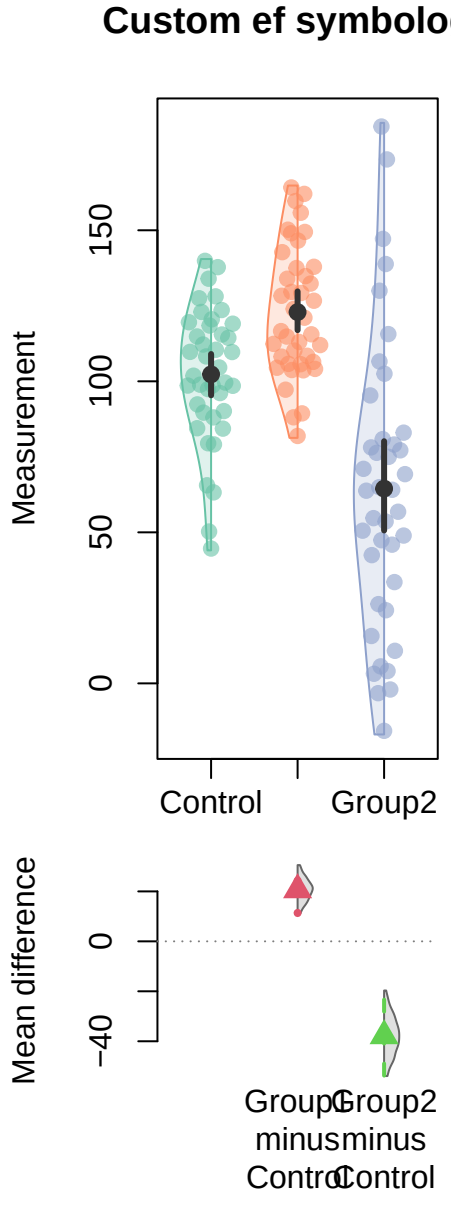

Custom ef ticks
Measurement
150
100
50
0
ZControl1
Group2
Group2
minus
ZControl1
1
0
−2
Cohen's d

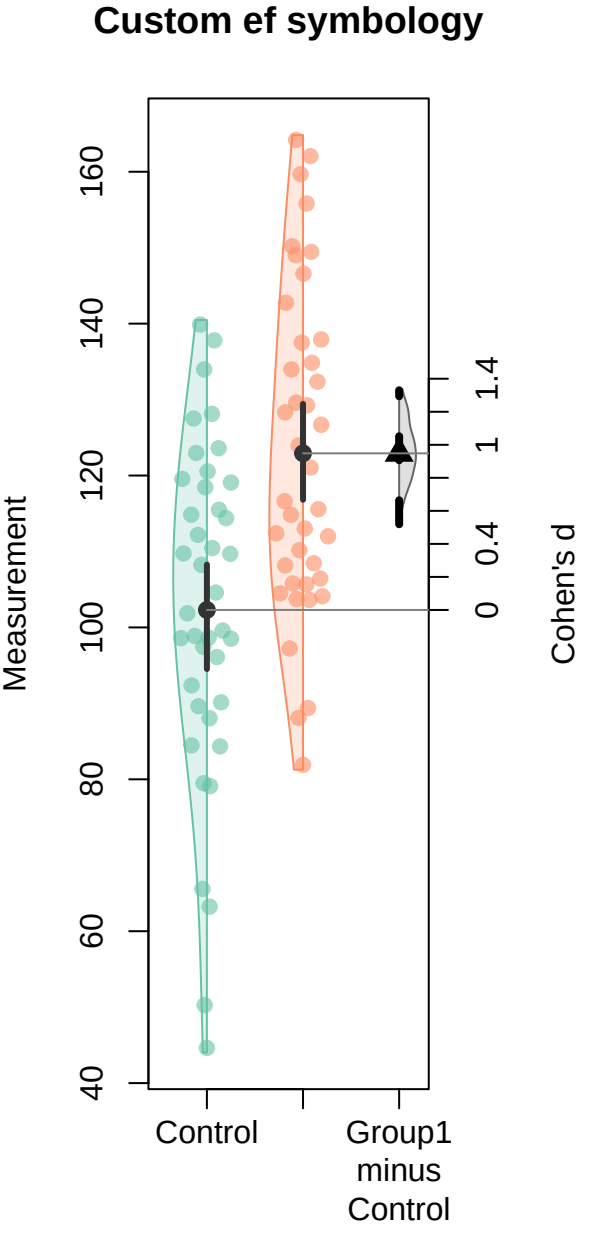

Custom ef labels
Measurement
0
50
150
ZControl1
Group2
Mean difference
Big
None
Huge
Group1 minus ZControl1
Group2 minus ZControl1


Custom ef labels
Measurement
0
50
100
150
Big
None
Huge
Mean difference
ZControl1
Group2
Group2 minus ZControl1

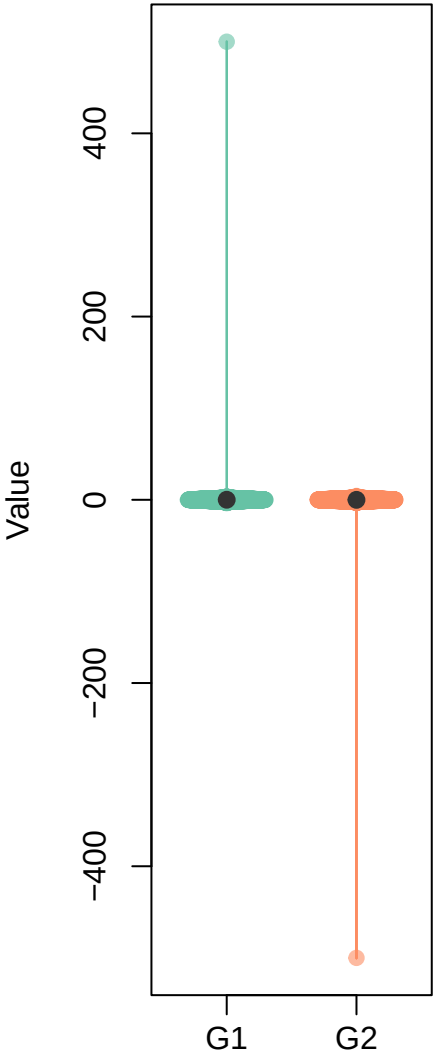

Custom ef labels
Measurement
0
50
150
ZControl1
Group2
Cohen's d
None
Huge
Group1 minus ZControl1
Group2 minus ZControl1

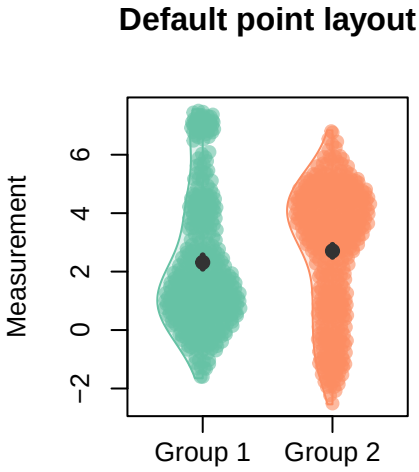

Custom ef labels
Measurement
0
50
100
150
Big
None
Huge
Cohen's d
ZControl1
Group2
Group2 minus ZControl1

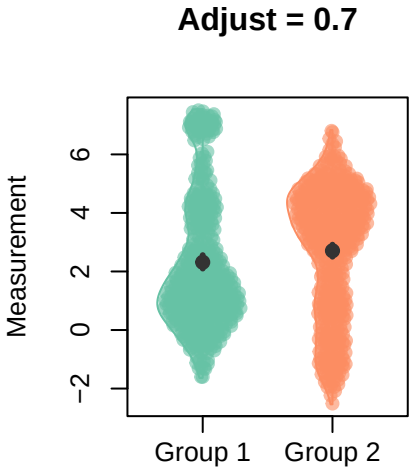

Custom ef symbology
Measurement
150
100
50
0
Control
Group2
Mean difference
0
−40
Group1
minus
Control
Group2
minus
Control

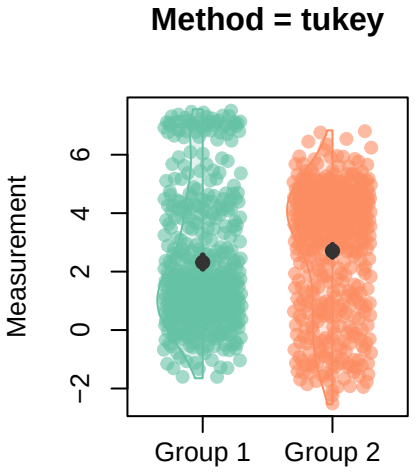

Custom ef symbology
Measurement
160
140
120
100
80
60
40
Cohen's d
1.4
1
0.4
0
Control
Group1
minus
Control

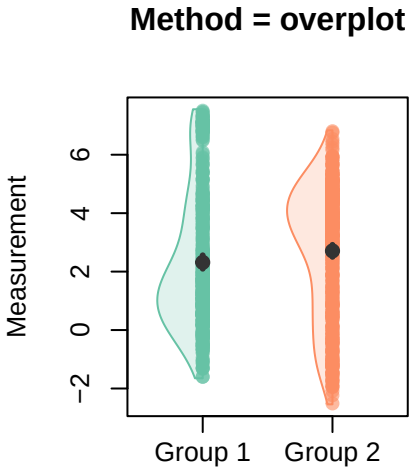
Pathological case − don't crash!

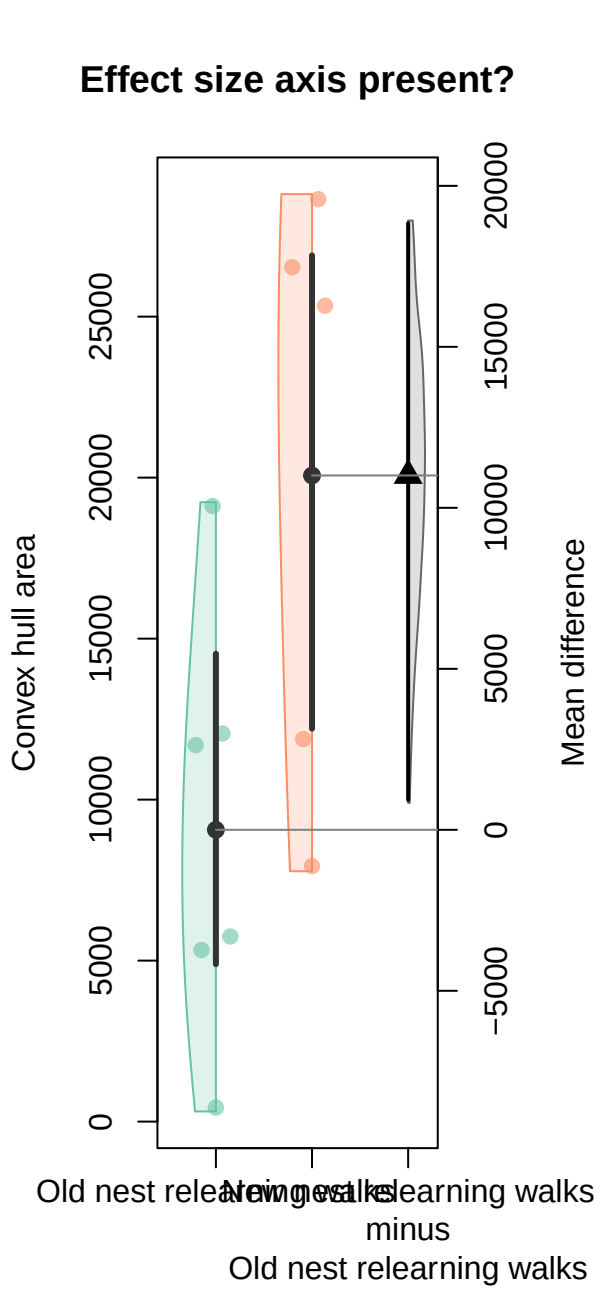



Default point layout
Measurement
6
4
2
0
−2
Group 1
Group 2

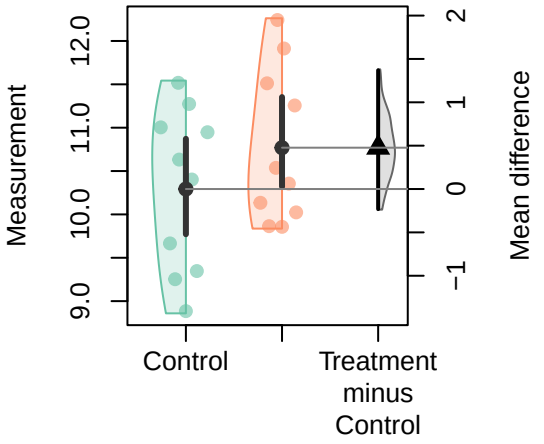

Adjust = 0.7
Measurement
6
4
2
0
−2
Group 1
Group 2


Method = tukey
Measurement
6
4
2
0
−2
Group 1
Group 2

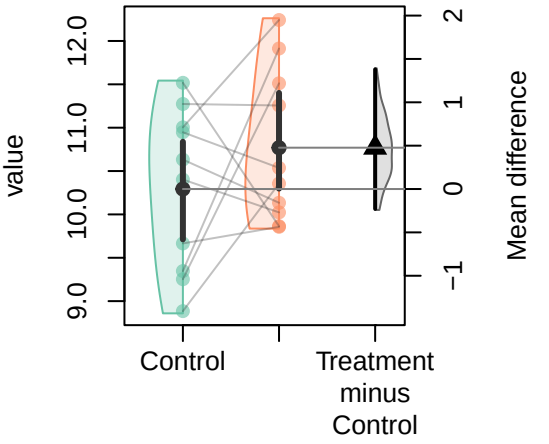

Method = overplot
Measurement
6
4
2
0
−2
Group 1
Group 2


Effect size axis present?
Convex hull area
0
5000
10000
15000
20000
25000
Mean difference
−5000
0
5000
10000
15000
20000
Old nest relearning walks
New nest learning walks
minus
Old nest relearning walks

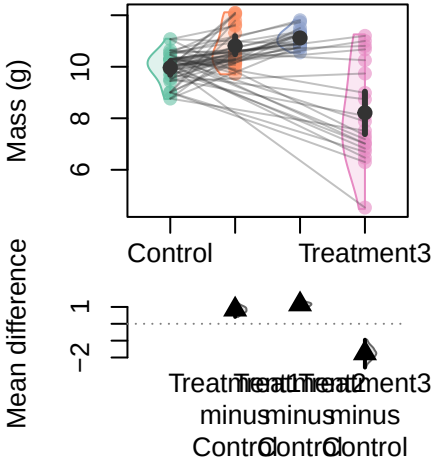
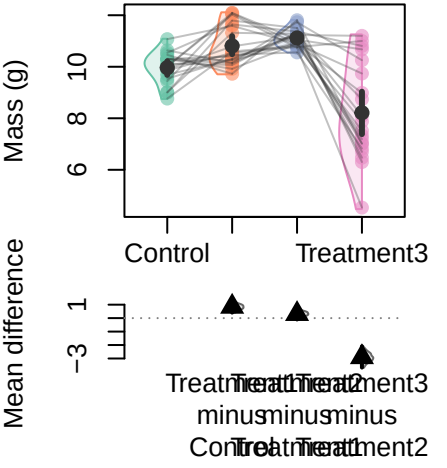
Manual wide to long



Auto wide to long



Paired − multiple groups



Paired − multiple groups, contrasts