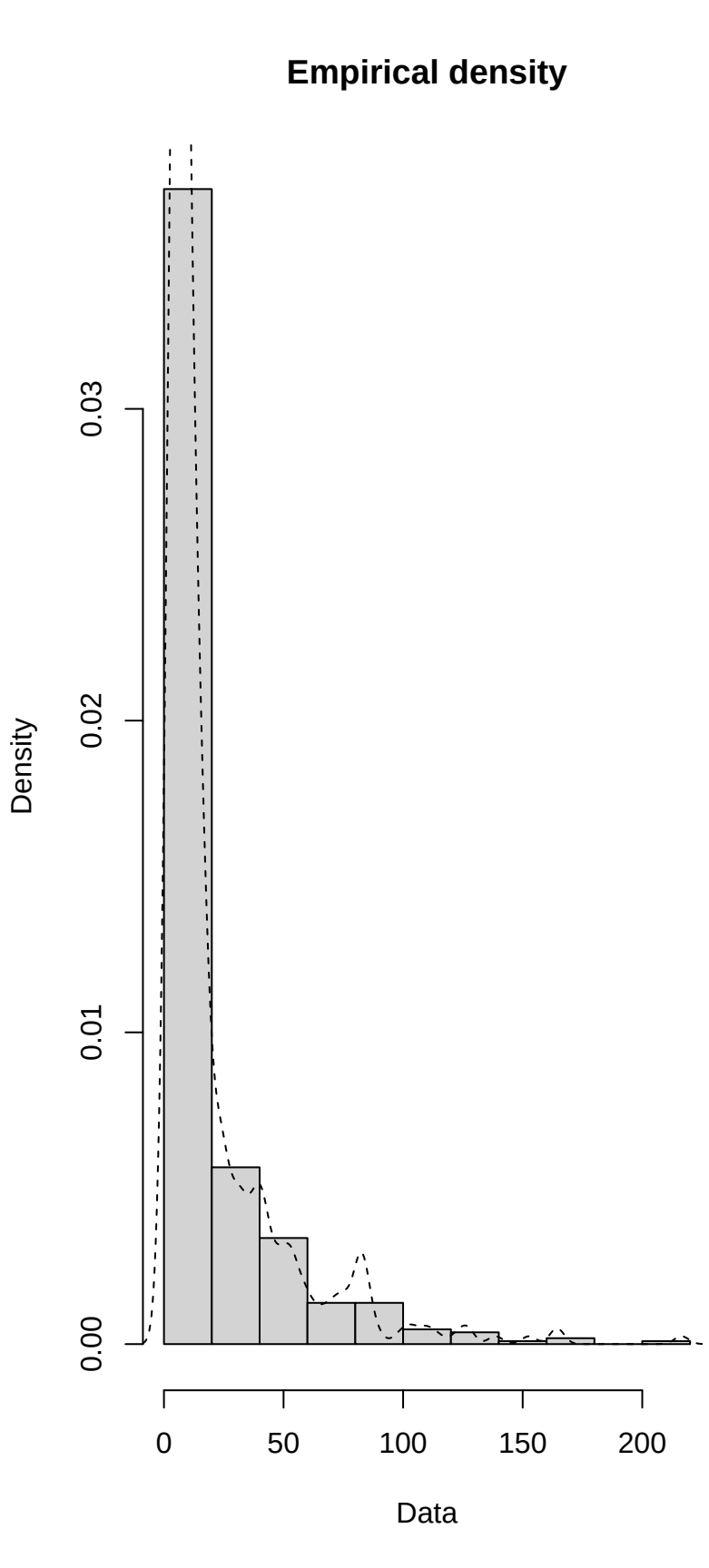
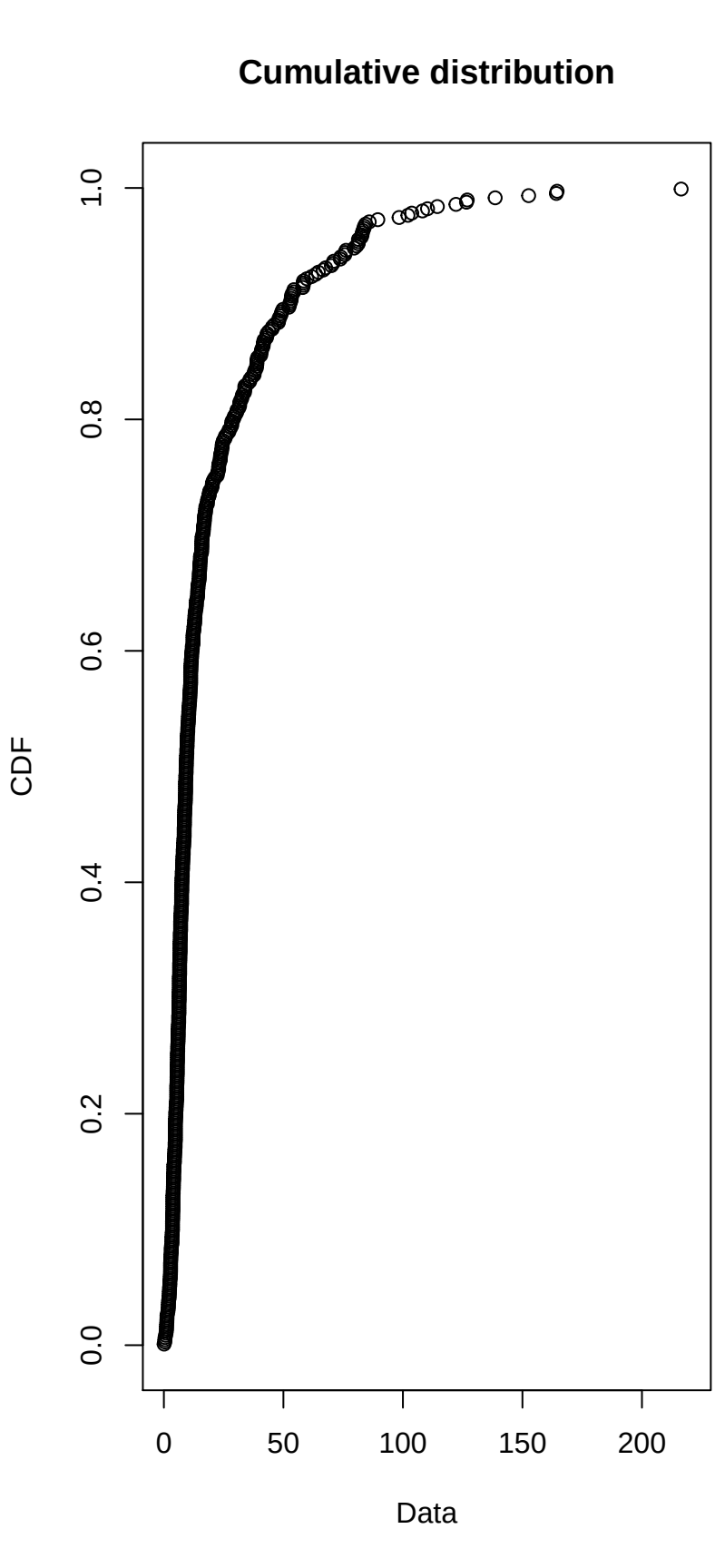
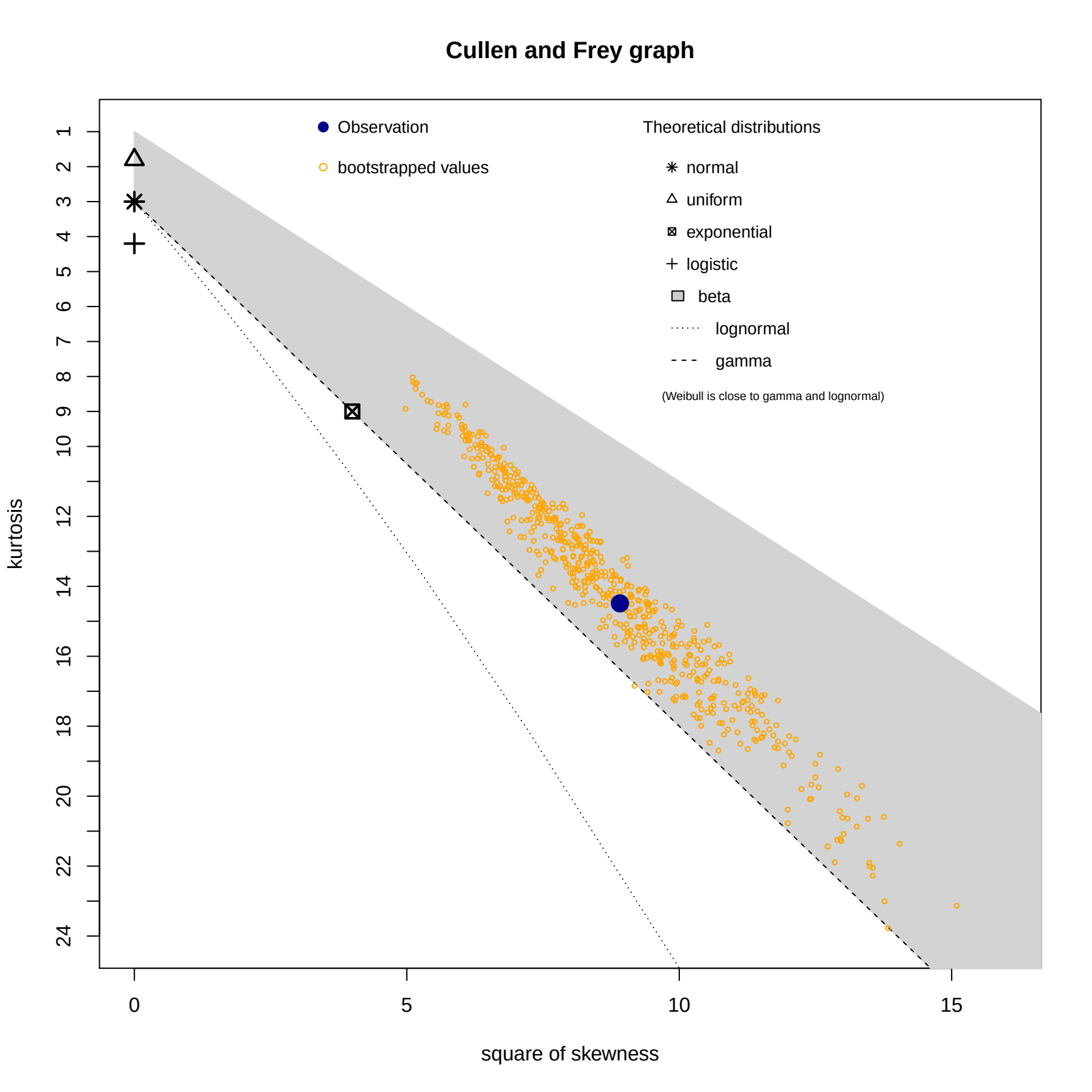
Summary of the variable

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.	NA's
0.09795	5.70000	9.34220	19.98309	21.31449	216.40000	86


Empirical density
Density
0.00
0.01
0.02
0.03
0
50
100
150
200
Data


Cumulative distribution
CDF
0.0
0.2
0.4
0.6
0.8
1.0
0
50
100
150
200
Data

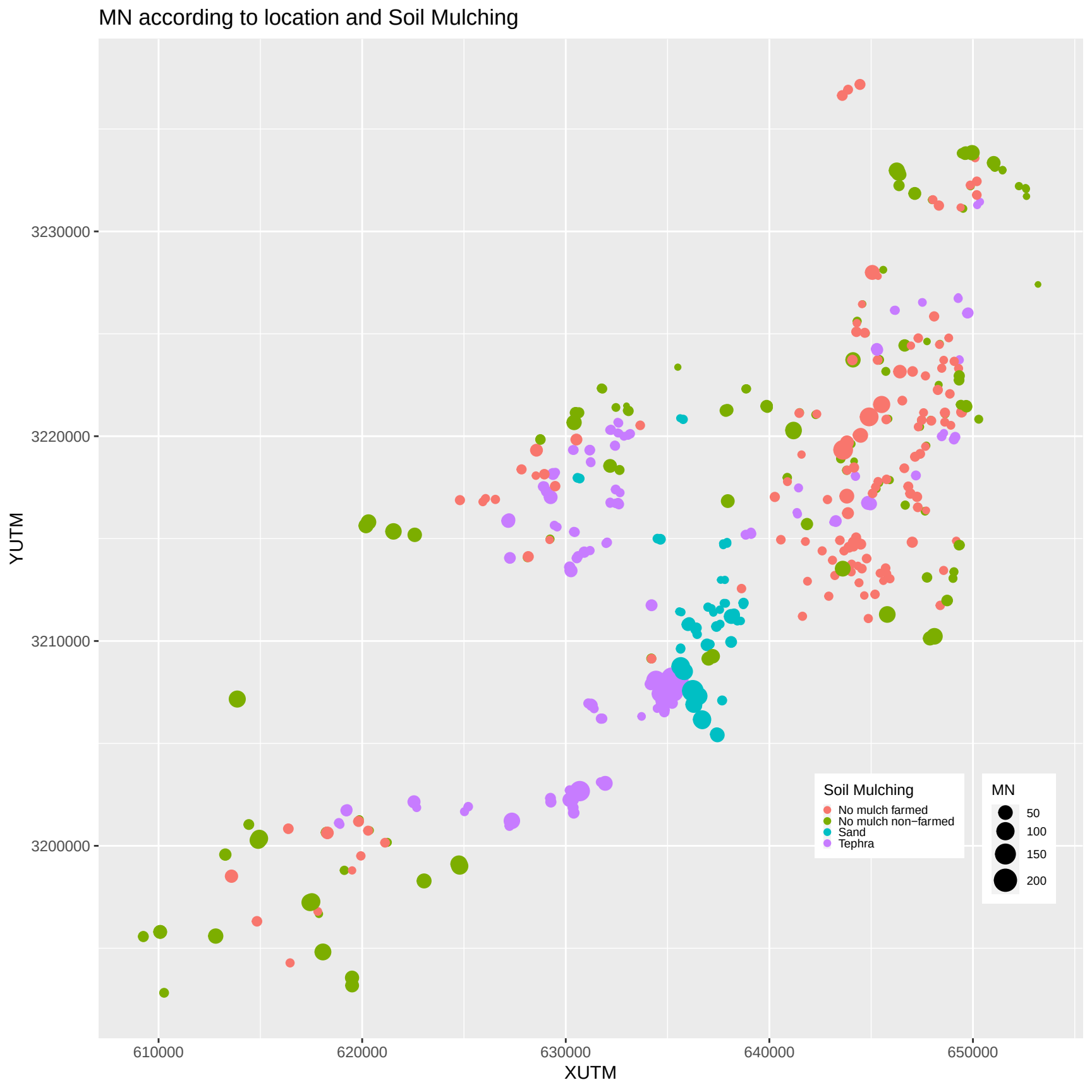

Cullen and Frey graph
Observation
bootstrapped values
Theoretical distributions
normal
uniform
exponential
logistic
beta
lognormal
gamma
(Weibull is close to gamma and lognormal)
kurtosis
square of skewness
0
5
10
15
1
2
3
4
5
6
7
8
9
10
12
14
16
18
20
22
24

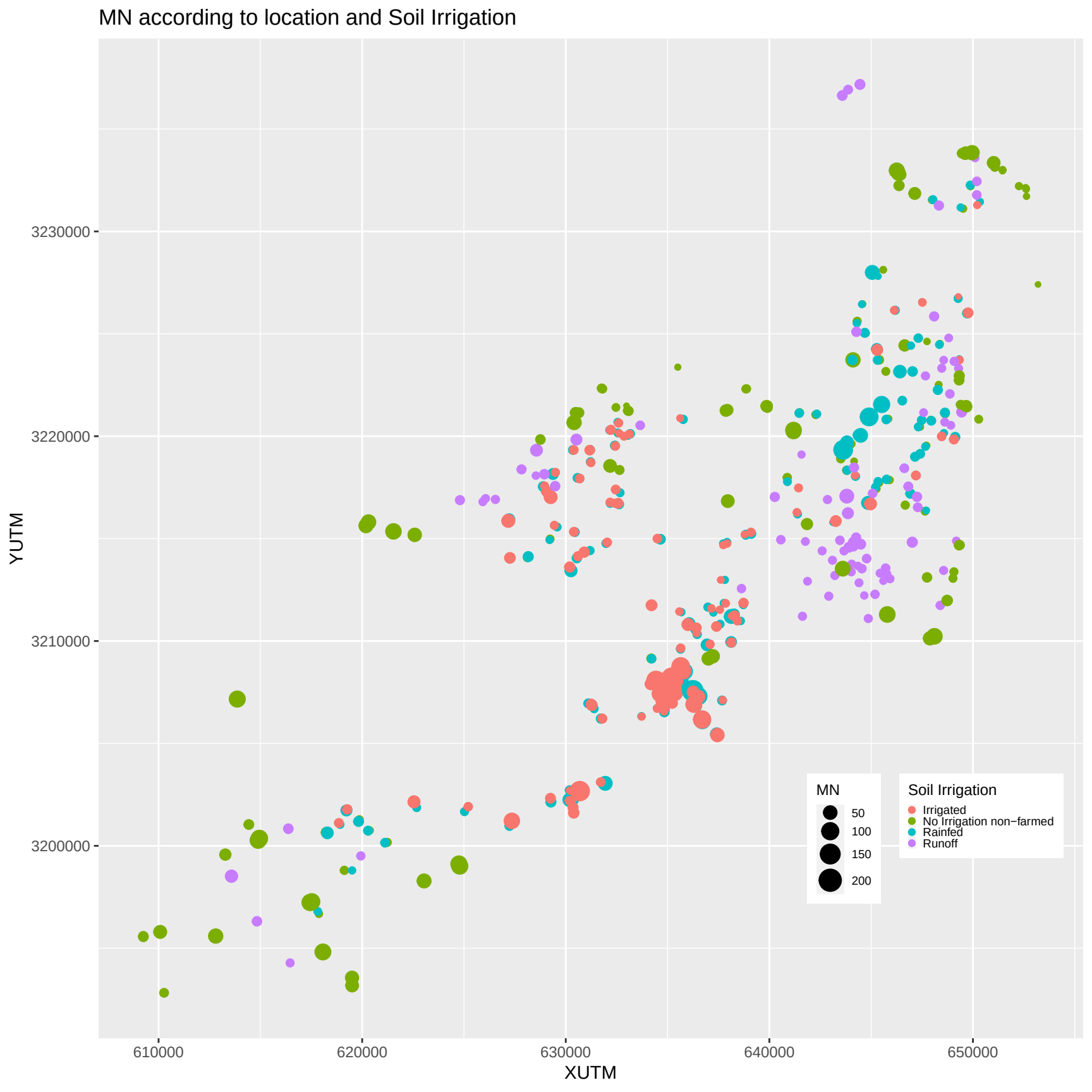
Shapiro−Wilk test for normality

Shapiro−Wilk normality test
data: dataframe[, variable_chr]
W = 0.63753, p−value < 2.2e−16

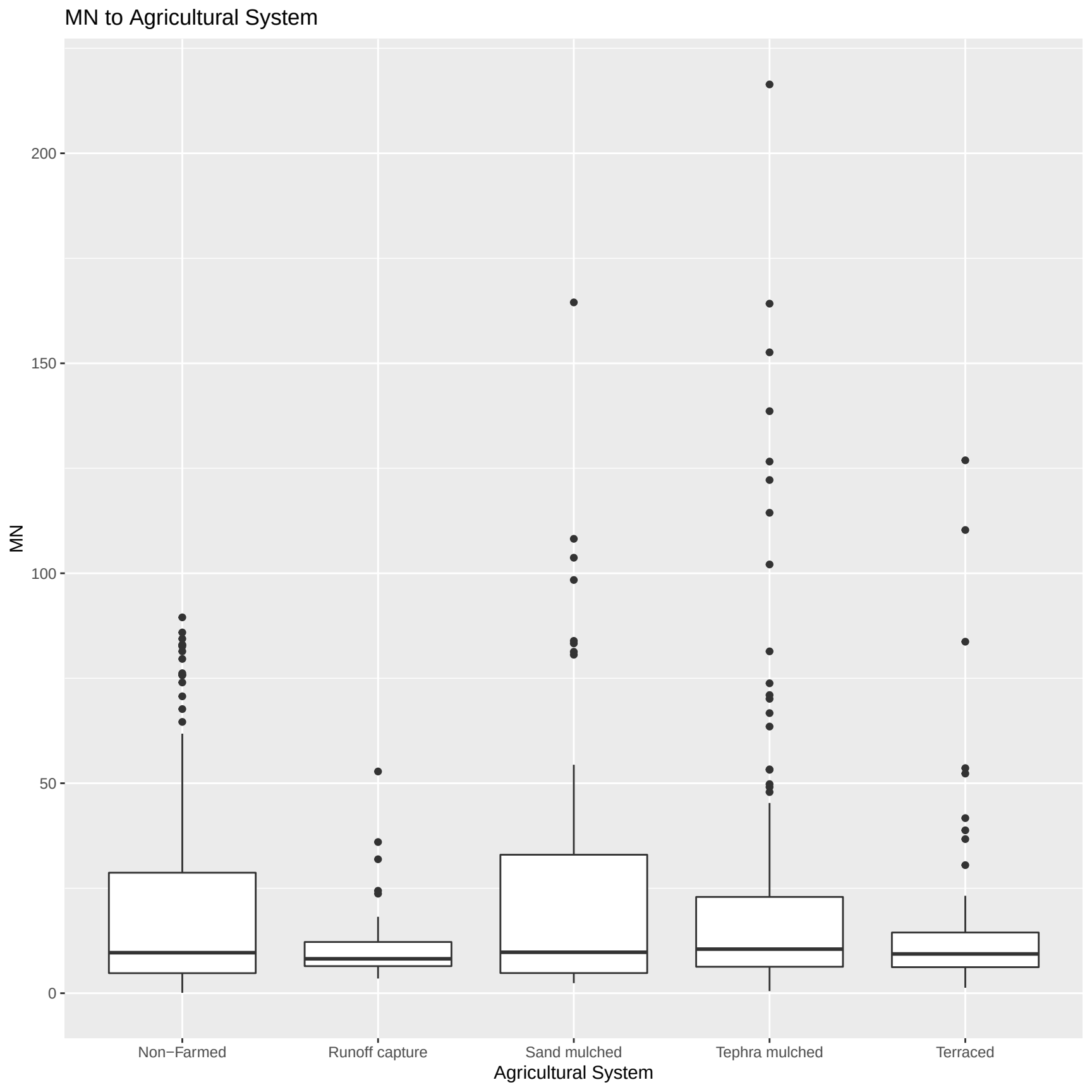
MN according to location and Agricultural System
YUTM
3230000
3220000
3210000
3200000
610000
620000
630000
640000
650000
XUTM
MN
50
100
150
200
Agricultural System
Non−Farmed
Runoff capture
Sand mulched
Tephra mulched
Terraced

MN according to location and Soil Farming
3230000
3220000
3210000
3200000
YUTM
610000
620000
630000
640000
650000
XUTM
Soil Farming
Farmed
Non−Farmed
MN
50
100
150
200


MN according to location and Soil Mulching
3230000
3220000
3210000
3200000
YUTM
610000
620000
630000
640000
650000
XUTM
Soil Mulching
No mulch farmed
No mulch non−farmed
Sand
Tephra
MN
50
100
150
200

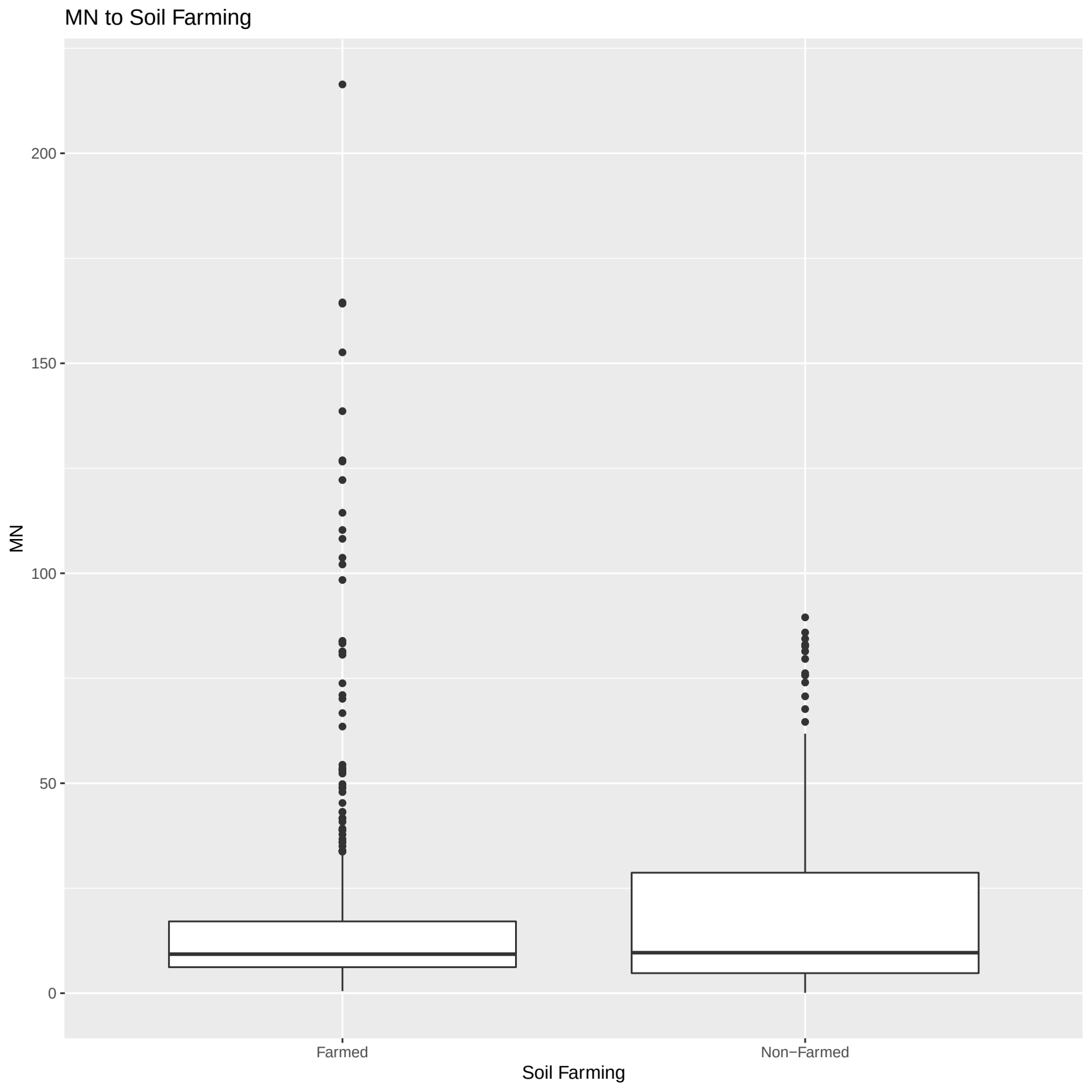

MN according to location and Soil Irrigation
YUTM
3230000
3220000
3210000
3200000
610000
620000
630000
640000
650000
XUTM
MN
50
100
150
200
Soil Irrigation
Irrigated
No Irrigation non−farmed
Rainfed
Runoff

MN according to location and Soil Position
YUTM
3230000
3220000
3210000
3200000
610000
620000
630000
640000
650000
XUTM
MN
50
100
150
200
Soil Position
Coastal non−farmed
Inland farmed
Mountain non−farmed


MN to Agricultural System
MN
200
150
100
50
0
Non−Farmed
Runoff capture
Sand mulched
Tephra mulched
Terraced
Agricultural System

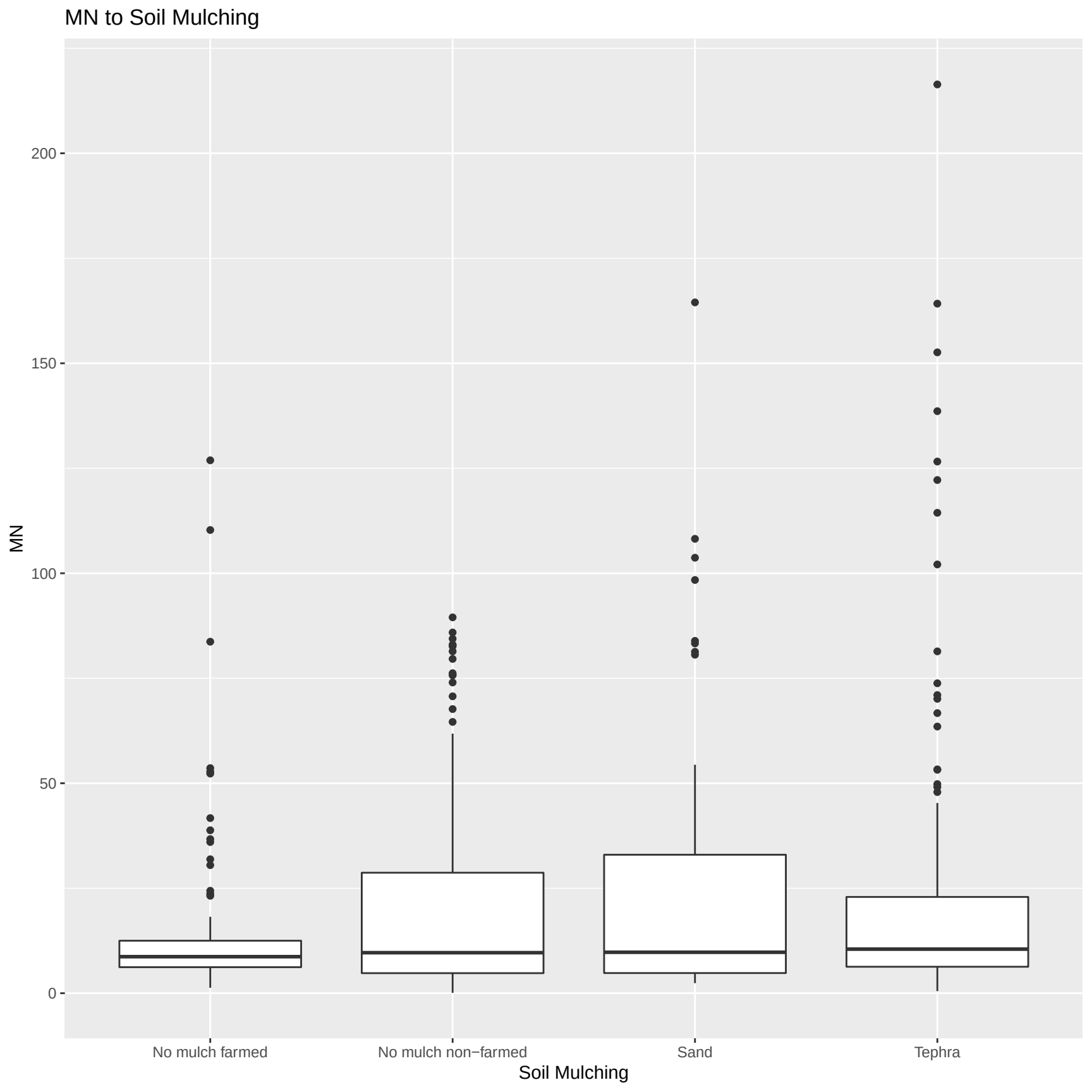
Wilcox test for mean comparison

	.y.	group1	group2	n1	n2	statistic	p	p.adj	p.adj.signif
1	MN	Non−Farmed	Runoff capture	176	83	8027.5	0.199	1.000	ns
2	MN	Non−Farmed	Sand mulched	176	60	4861.5	0.360	1.000	ns
3	MN	Non−Farmed	Tephra mulched	176	160	13411.0	0.452	1.000	ns
4	MN	Non−Farmed	Terraced	176	50	4433.5	0.936	1.000	ns
5	MN	Runoff capture	Sand mulched	83	60	2121.0	0.132	1.000	ns
6	MN	Runoff capture	Tephra mulched	83	160	5503.5	0.029	0.288	ns
7	MN	Runoff capture	Terraced	83	50	1885.5	0.380	1.000	ns
8	MN	Sand mulched	Tephra mulched	60	160	4892.0	0.828	1.000	ns
9	MN	Sand mulched	Terraced	60	50	1602.0	0.542	1.000	ns
10	MN	Tephra mulched	Terraced	160	50	4312.0	0.406	1.000	ns


MN to Soil Farming
200
150
100
50
0
MN
Farmed
Non−Farmed
Soil Farming

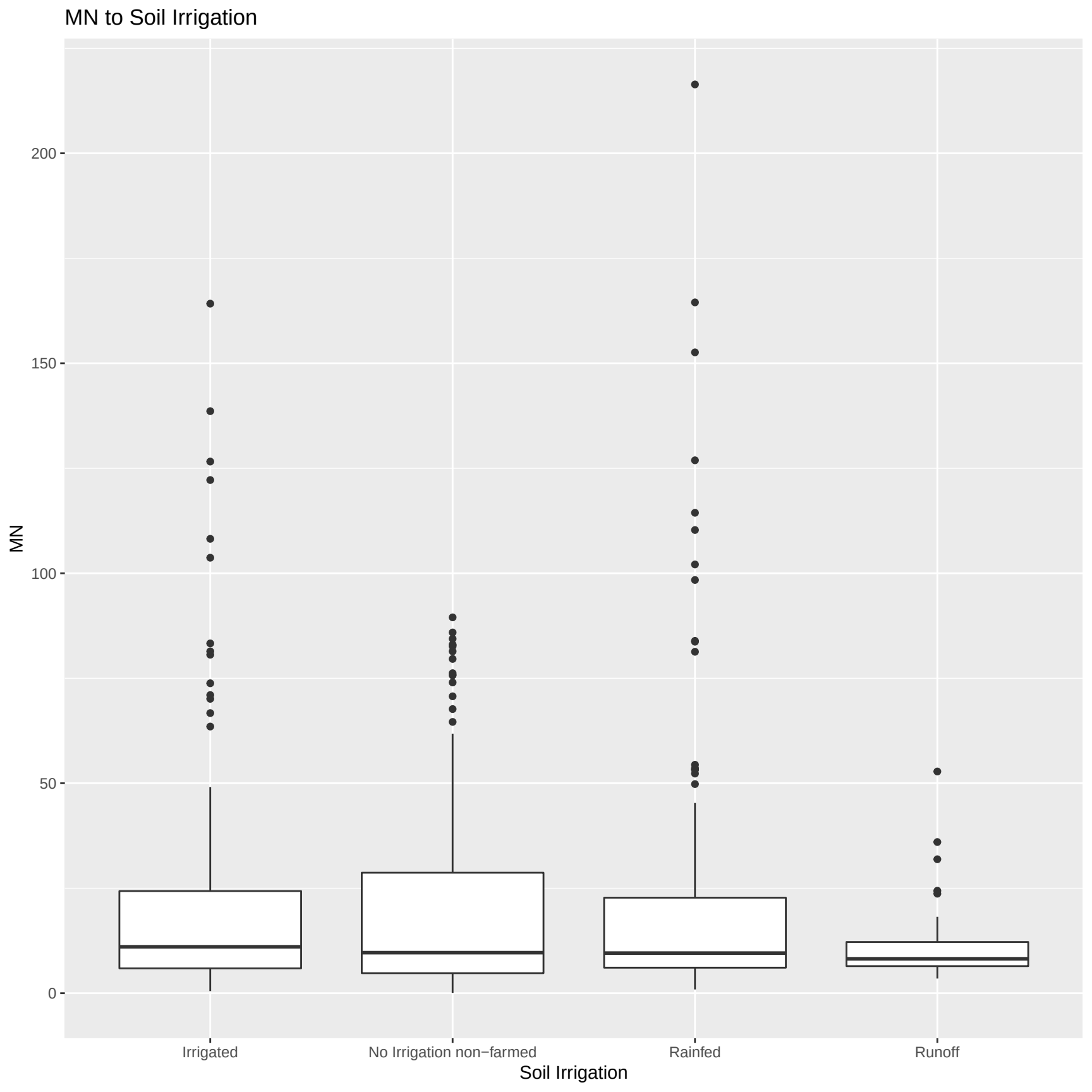
Wilcox test for mean comparison

	.y.	group1	group2	n1	n2	statistic	p
1	MN	Farmed	Non−Farmed	353	176	31394.5	0.842


MN to Soil Mulching
MN
200
150
100
50
0
No mulch farmed
No mulch non−farmed
Sand
Tephra
Soil Mulching

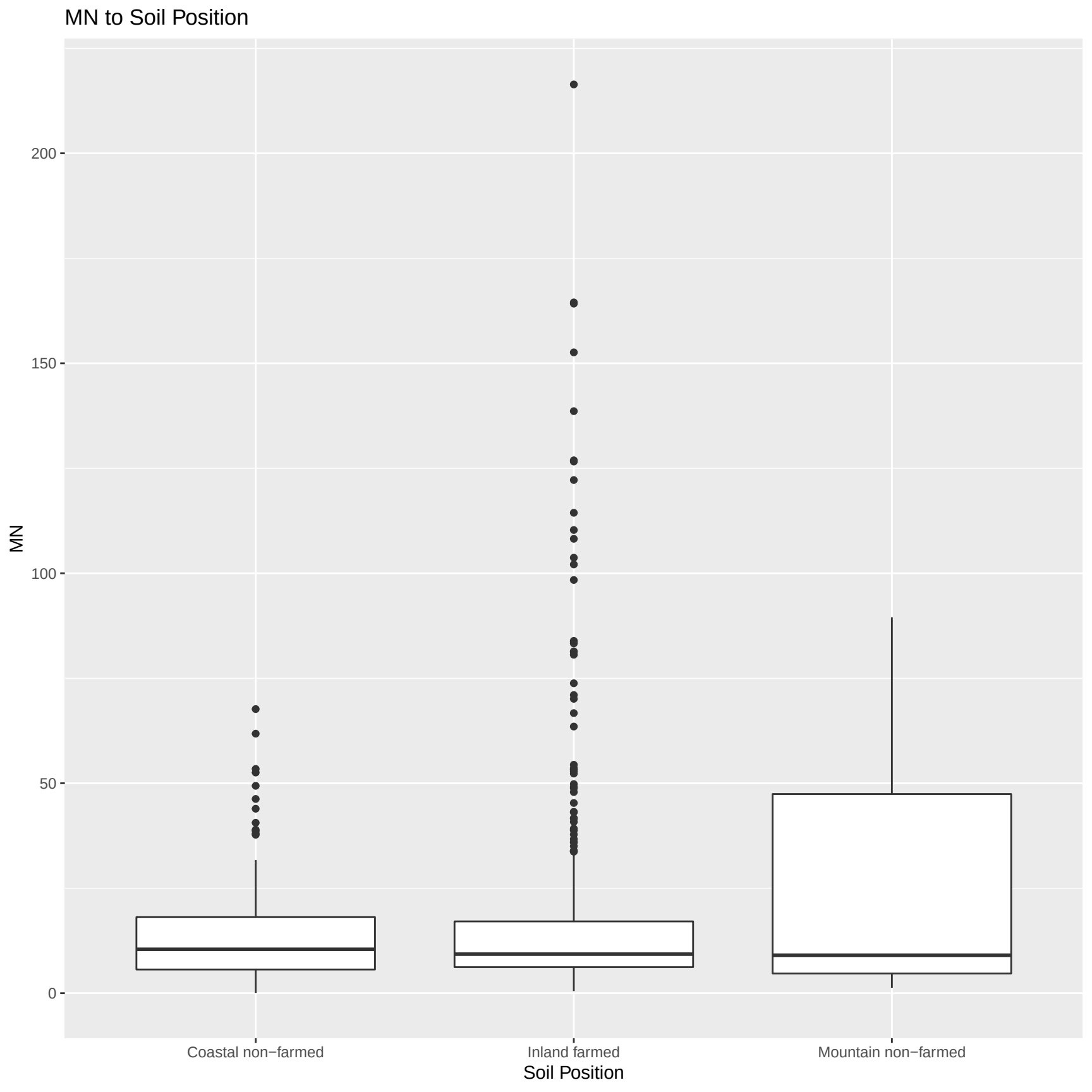
Wilcox test for mean comparison

	.y.	group1	group2	n1	n2	statistic	p	p.adj	p.adj.signif
1	MN	No mulch farmed	No mulch non−farmed	133	176	10947.0	0.331	1.000	ns
2	MN	No mulch farmed	Sand	133	60	3519.0	0.190	0.950	ns
3	MN	No mulch farmed	Tephra	133	160	9191.5	0.045	0.269	ns
4	MN	No mulch non−farmed	Sand	176	60	4861.5	0.360	1.000	ns
5	MN	No mulch non−farmed	Tephra	176	160	13411.0	0.452	1.000	ns
6	MN	Sand	Tephra	60	160	4892.0	0.828	1.000	ns


MN to Soil Irrigation
MN
200
150
100
50
0
Irrigated
No Irrigation non−farmed
Rainfed
Runoff
Soil Irrigation

Wilcox test for mean comparison

	.y.	group1	group2	n1	n2	statistic	p	p.adj	p.adj.signif
1	MN	Irrigated	No Irrigation non−farmed	110	176	10516.0	0.220	0.796	ns
2	MN	Irrigated	Rainfed	110	160	9502.0	0.266	0.796	ns
3	MN	Irrigated	Runoff	110	83	5513.0	0.014	0.082	ns
4	MN	No Irrigation non−farmed	Rainfed	176	160	13862.0	0.807	0.807	ns
5	MN	No Irrigation non−farmed	Runoff	176	83	8027.5	0.199	0.796	ns
6	MN	Rainfed	Runoff	160	83	7387.0	0.151	0.755	ns


MN to Soil Position
MN
200
150
100
50
0
Coastal non−farmed
Inland farmed
Mountain non−farmed
Soil Position

Wilcox test for mean comparison

	.y.	group1	group2	n1	n2	statistic	p	p.adj	p.adj.signif
1	MN	Coastal non−farmed	Inland farmed	90	353	15573.0	0.774	1.000	ns
2	MN	Coastal non−farmed	Mountain non−farmed	90	86	3467.0	0.234	0.702	ns
3	MN	Inland farmed	Mountain non−farmed	353	86	15197.5	0.986	1.000	ns