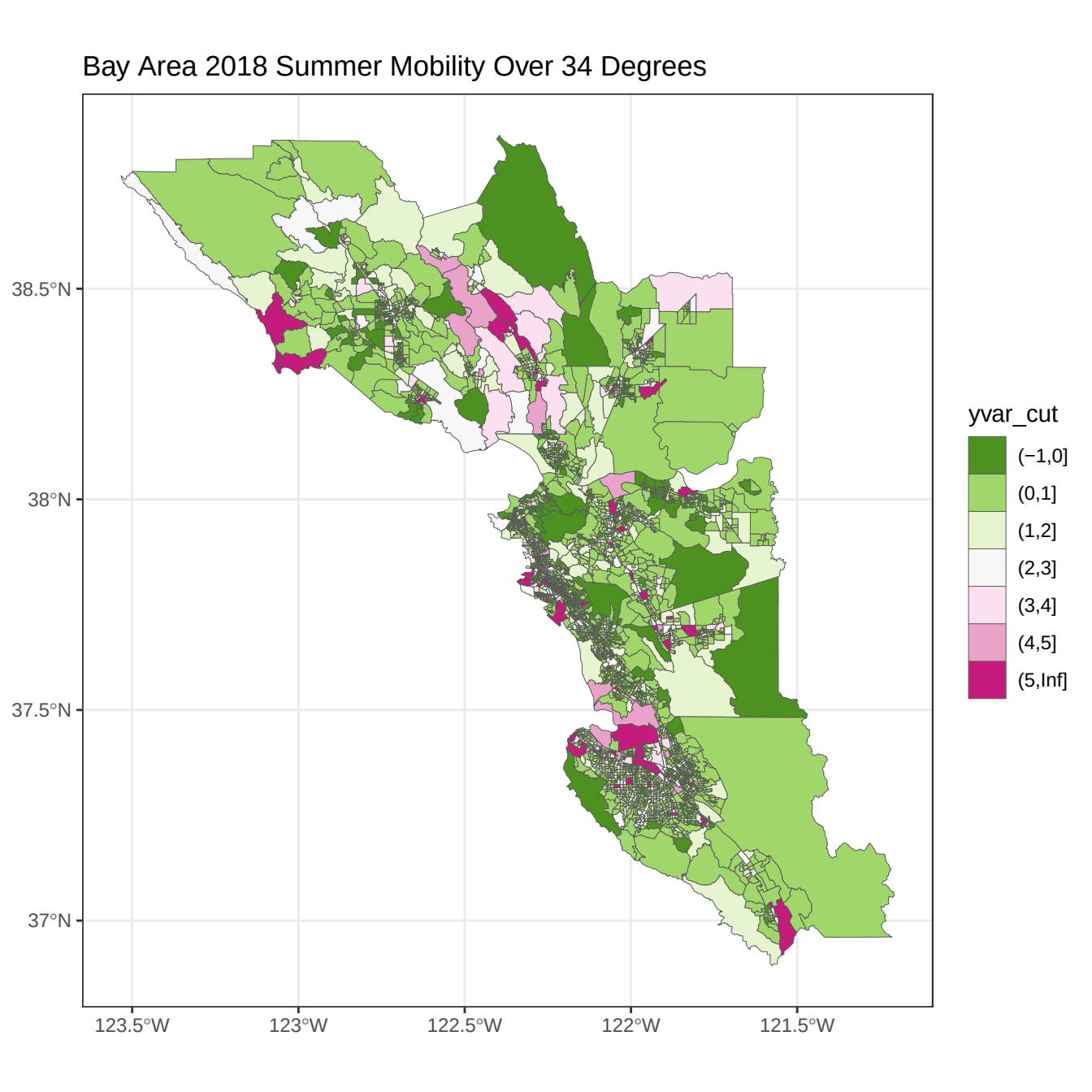
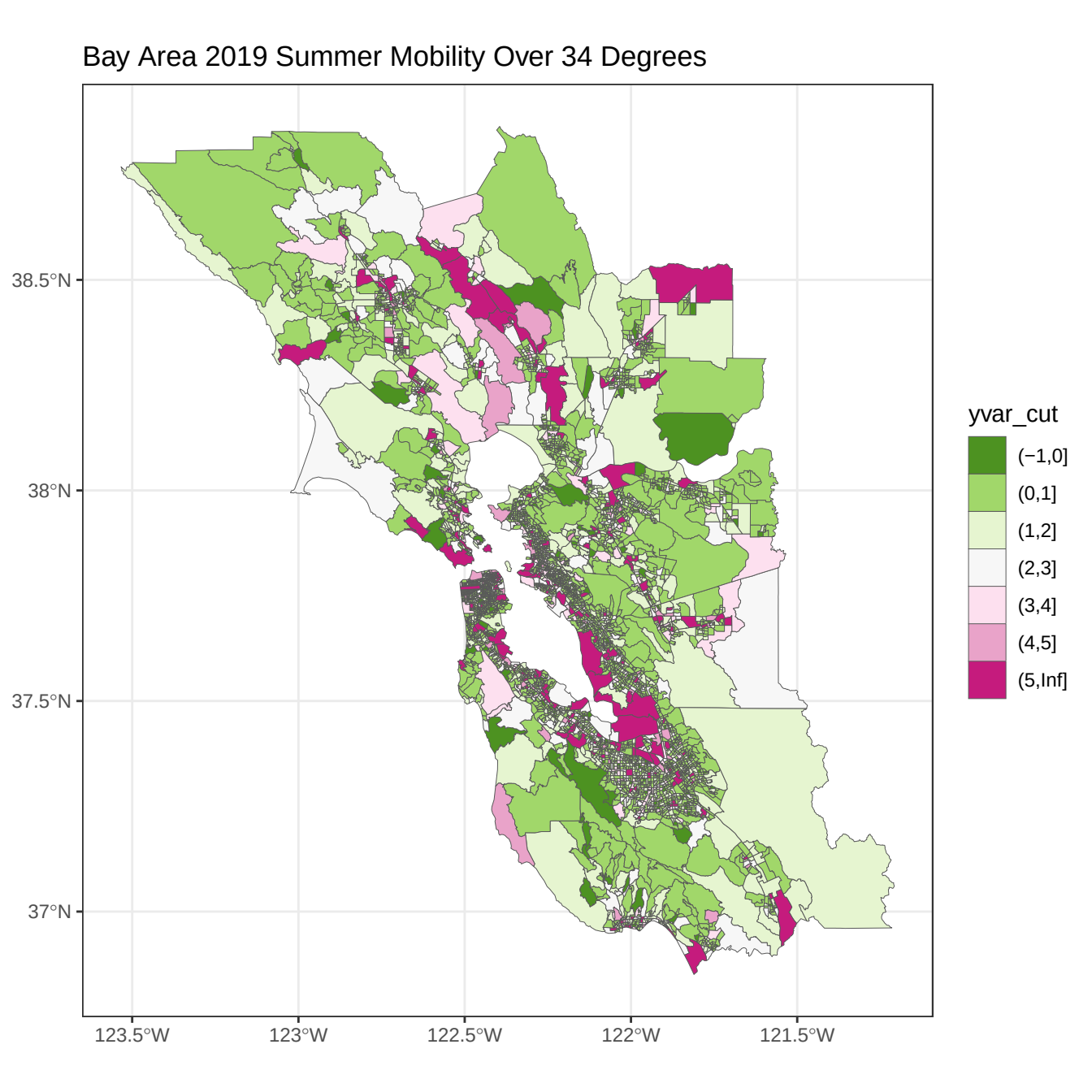
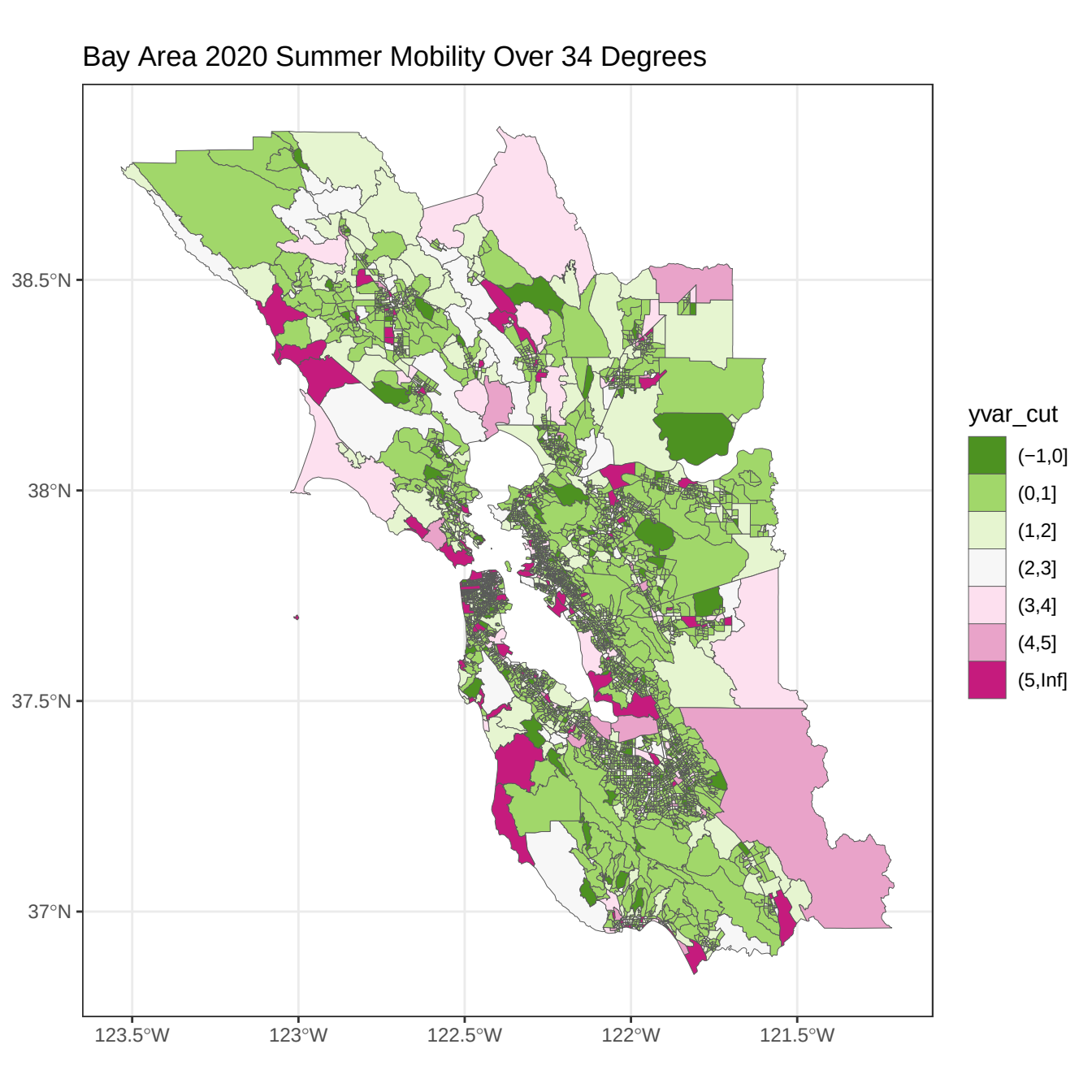
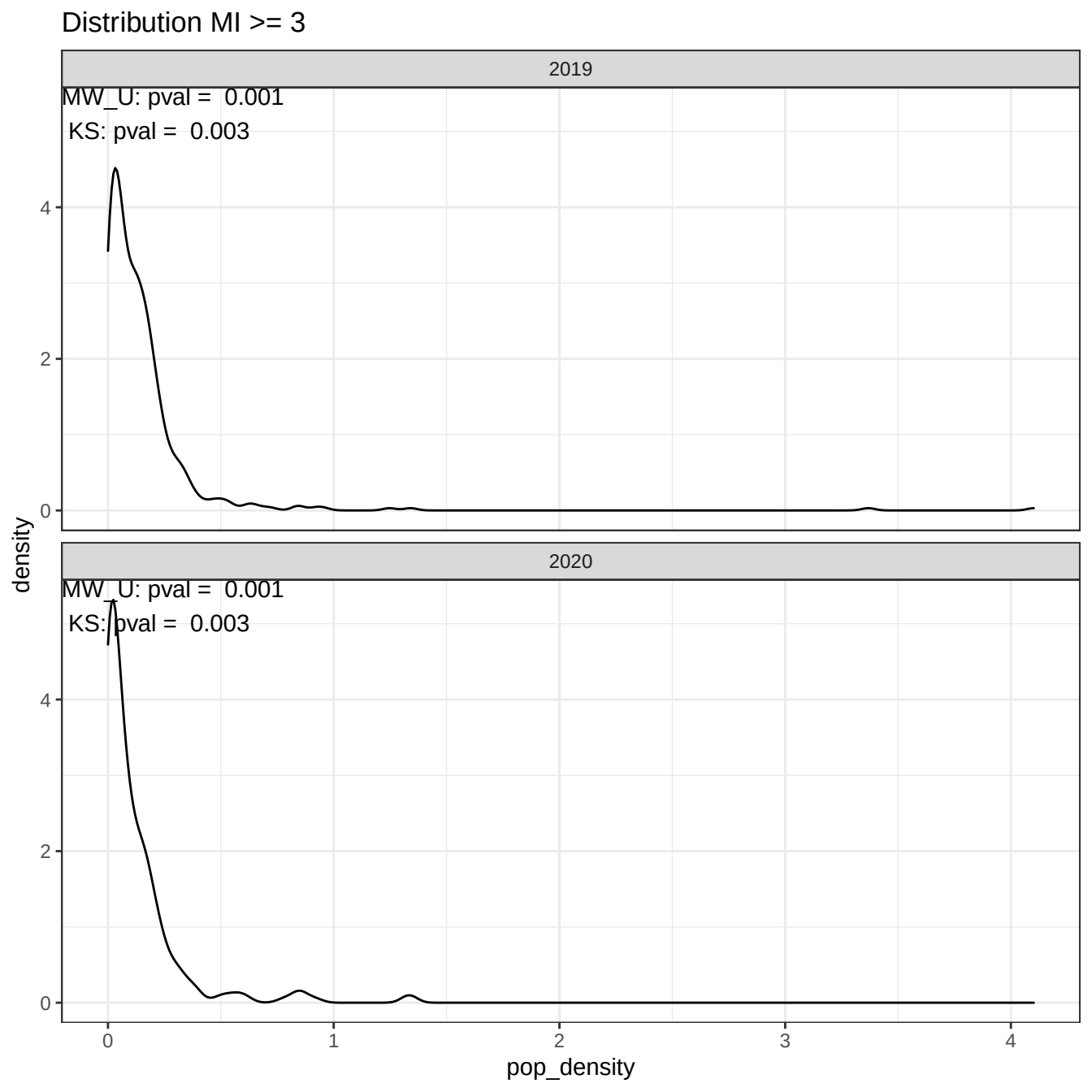
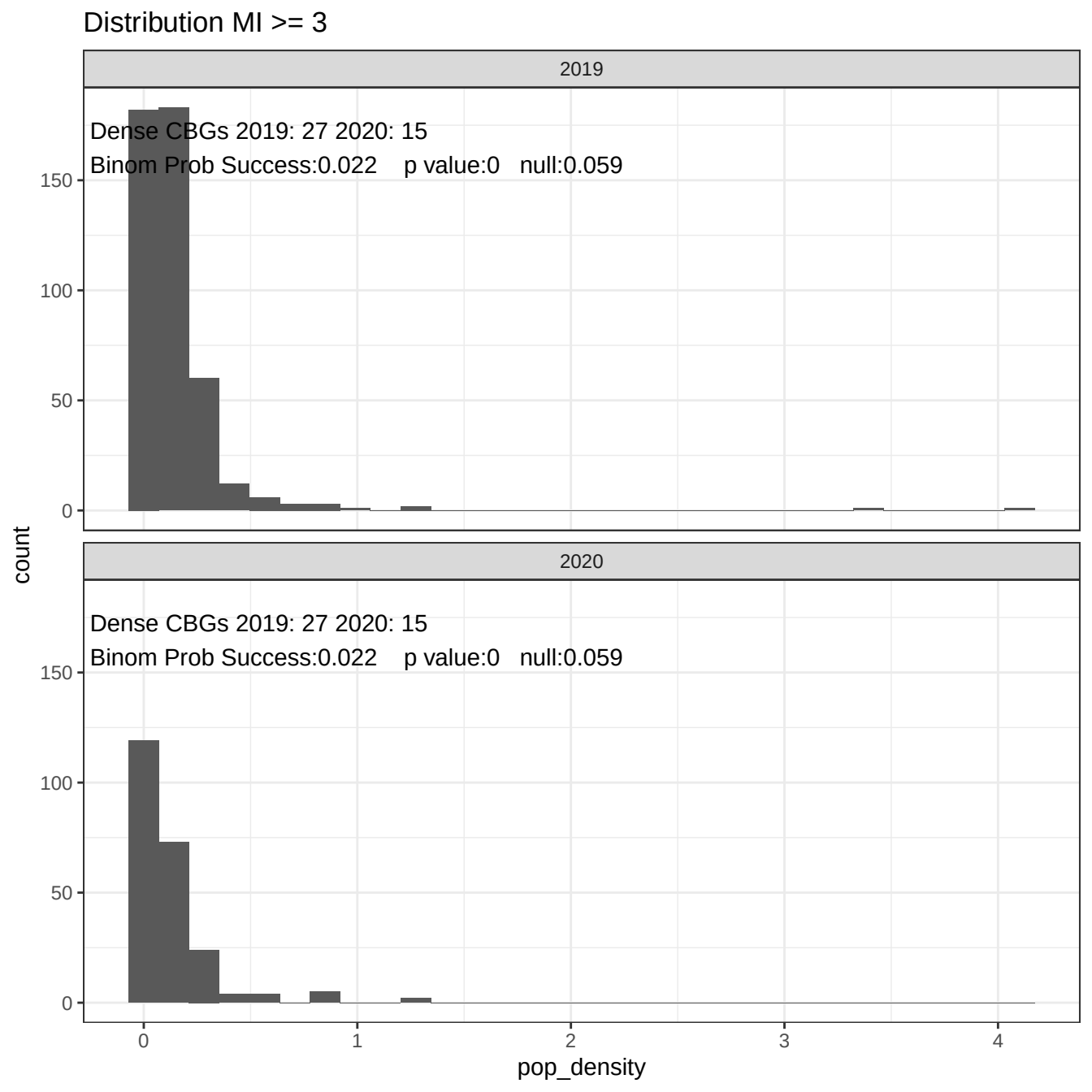
##−−−−−− Mon Aug 23 17:28:09 2021 −−−−−−##
Bay Area Data Overview

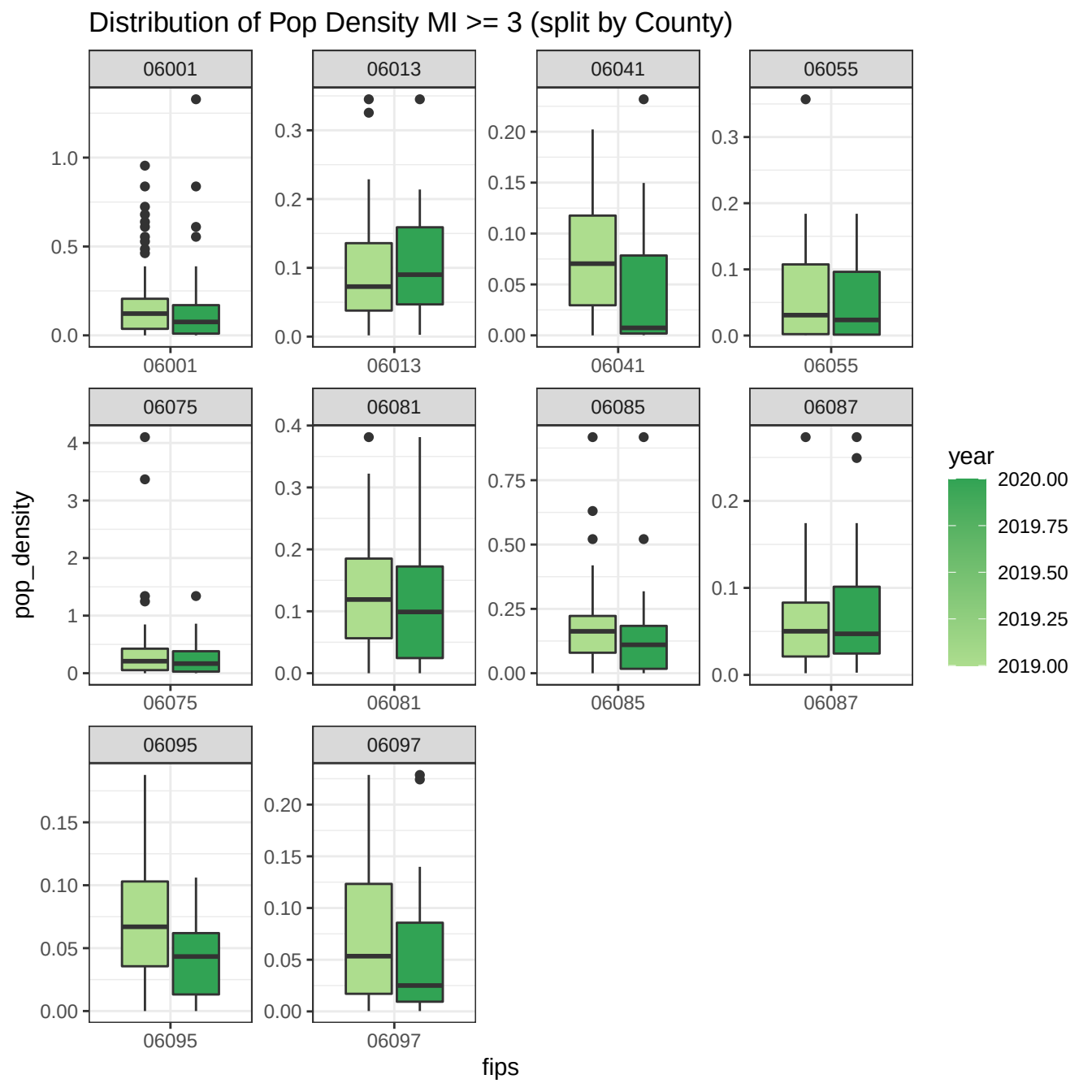

Bay Area 2018 Summer Mobility Over 34 Degrees
38.5°N
38°N
37.5°N
37°N
123.5°W
123°W
122.5°W
122°W
121.5°W
yvar_cut
(−1,0]
(0,1]
(1,2]
(2,3]
(3,4]
(4,5]
(5,Inf]

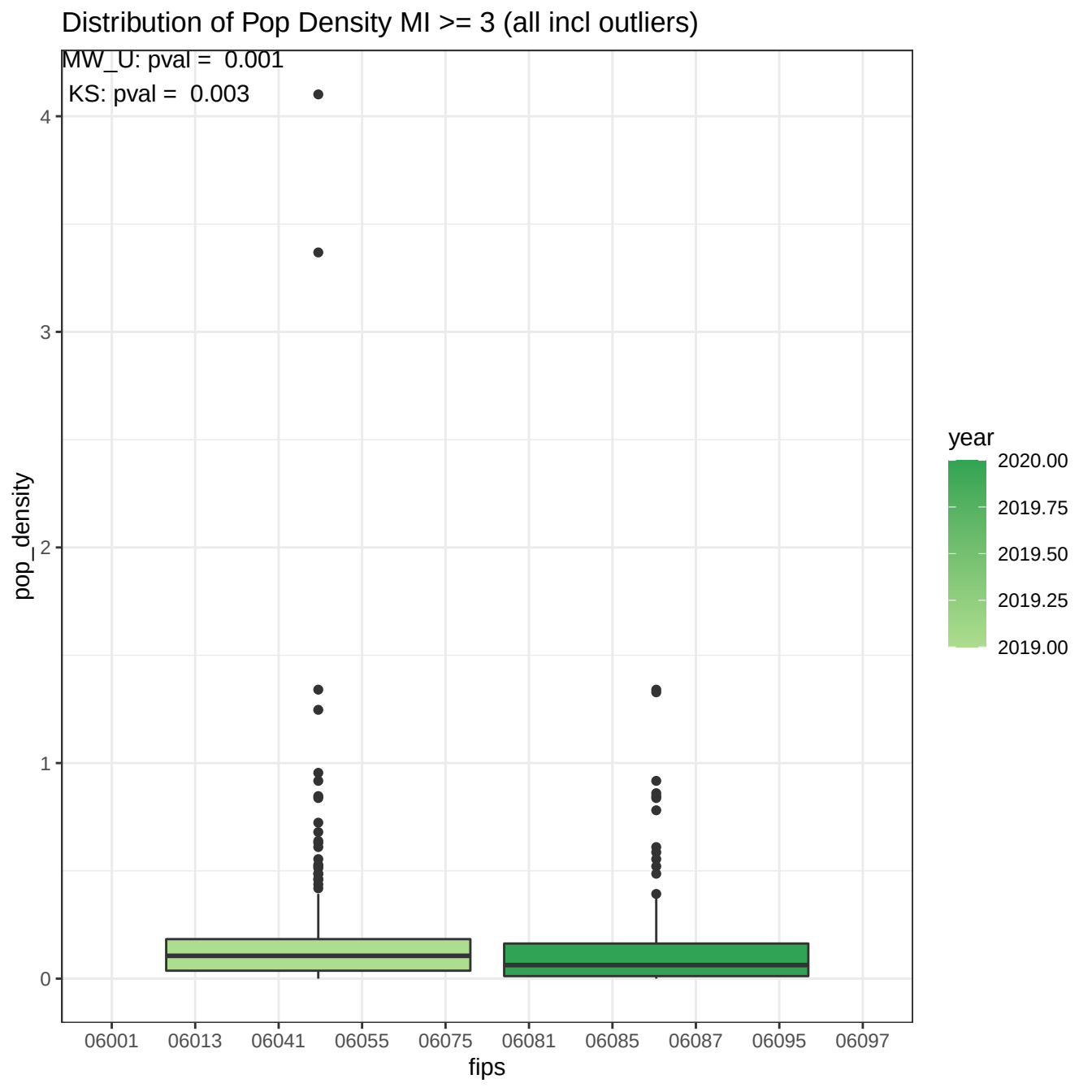

Bay Area 2019 Summer Mobility Over 34 Degrees
38.5°N
38°N
37.5°N
37°N
123.5°W
123°W
122.5°W
122°W
121.5°W
yvar_cut
(−1,0]
(0,1]
(1,2]
(2,3]
(3,4]
(4,5]
(5,Inf]

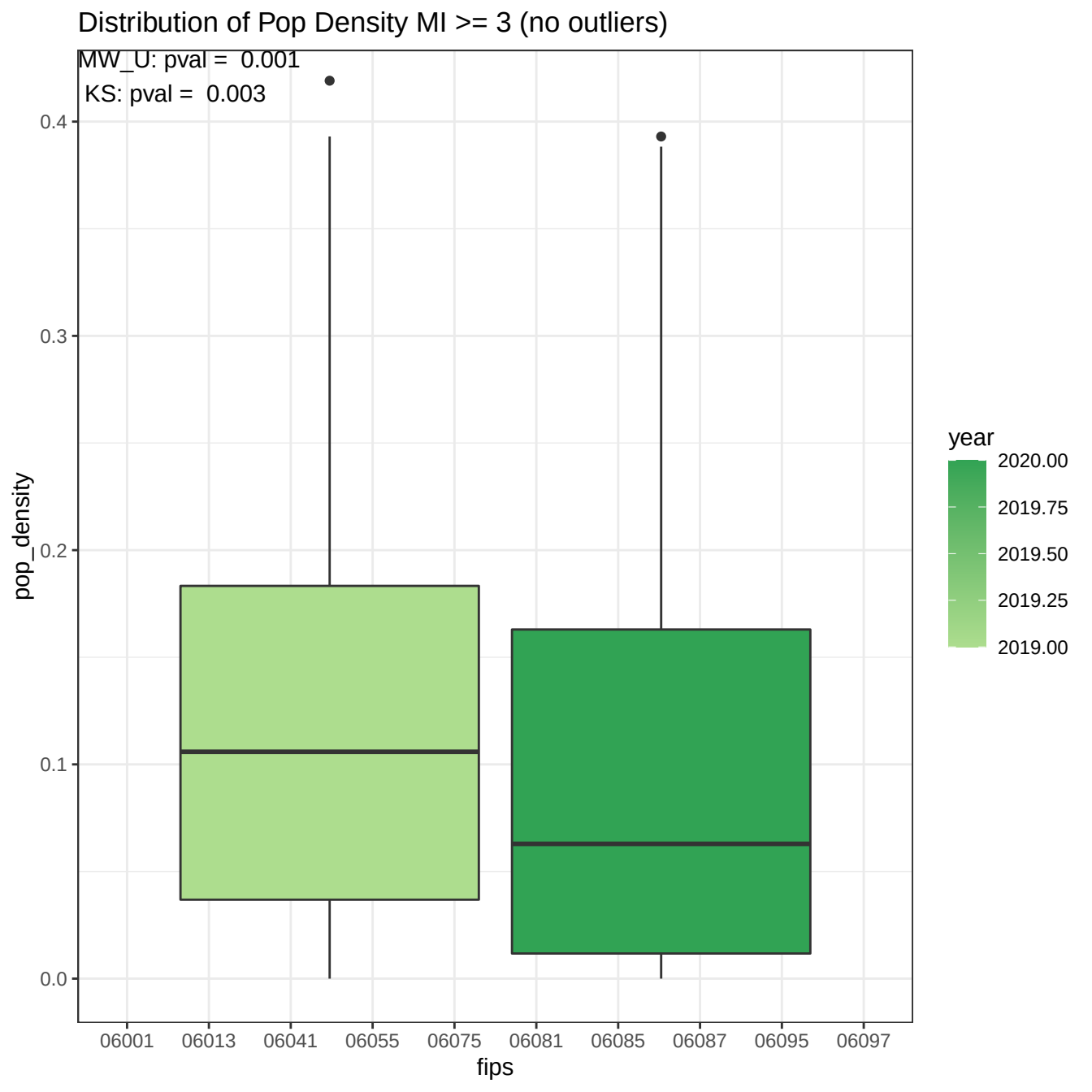

Bay Area 2020 Summer Mobility Over 34 Degrees
38.5°N
38°N
37.5°N
37°N
123.5°W
123°W
122.5°W
122°W
121.5°W
yvar_cut
(−1,0]
(0,1]
(1,2]
(2,3]
(3,4]
(4,5]
(5,Inf]

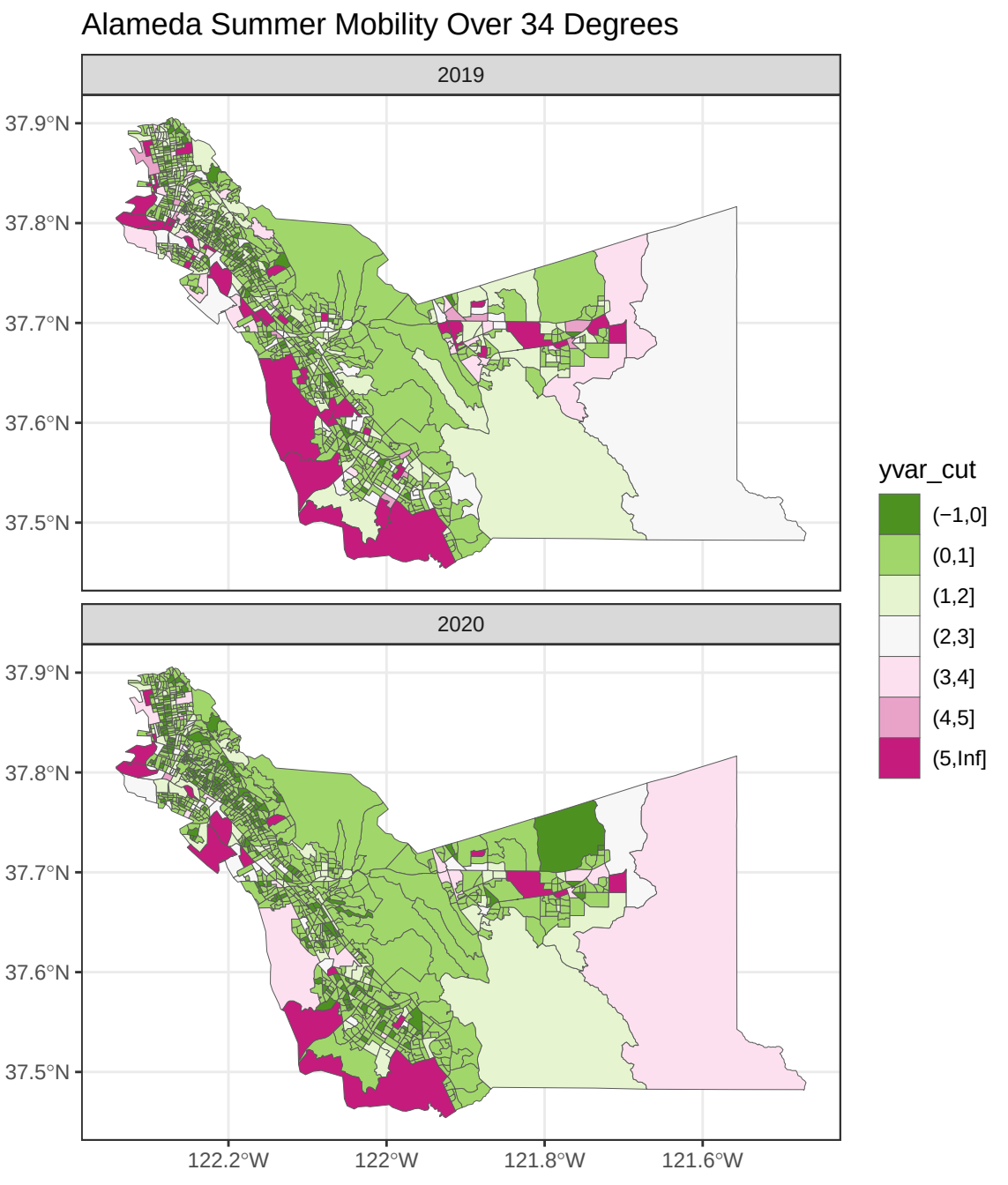

Distribution MI >= 3
2019
MW_U: pval = 0.001
KS: pval = 0.003
2020
MW_U: pval = 0.001
KS: pval = 0.003
density
pop_density
0
2
4
0
1
2
3
4

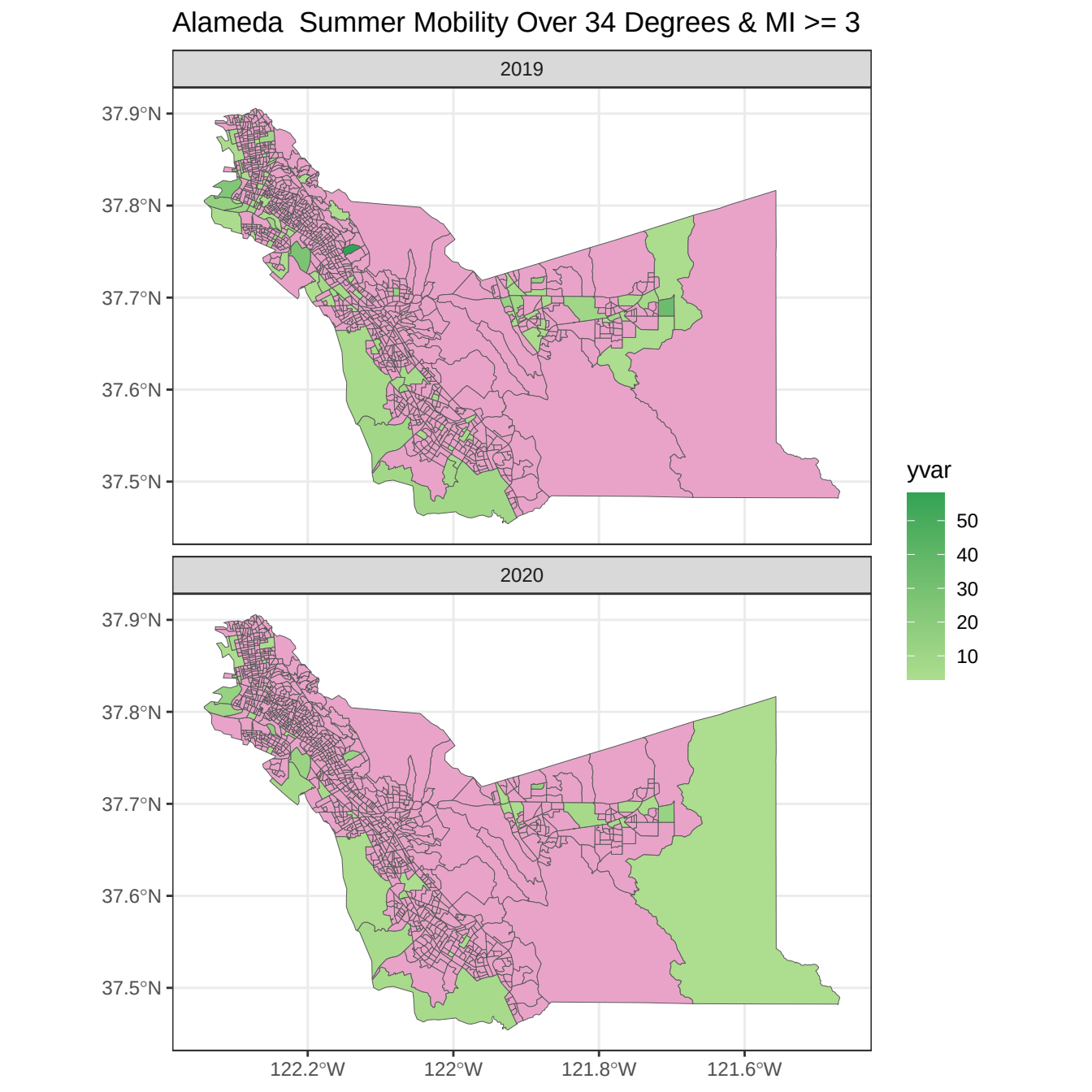

Distribution MI >= 3
2019
Dense CBGs 2019: 27 2020: 15
Binom Prob Success:0.022 p value:0 null:0.059
150
100
50
0
count
2020
Dense CBGs 2019: 27 2020: 15
Binom Prob Success:0.022 p value:0 null:0.059
150
100
50
0
0
1
2
3
4
pop_density

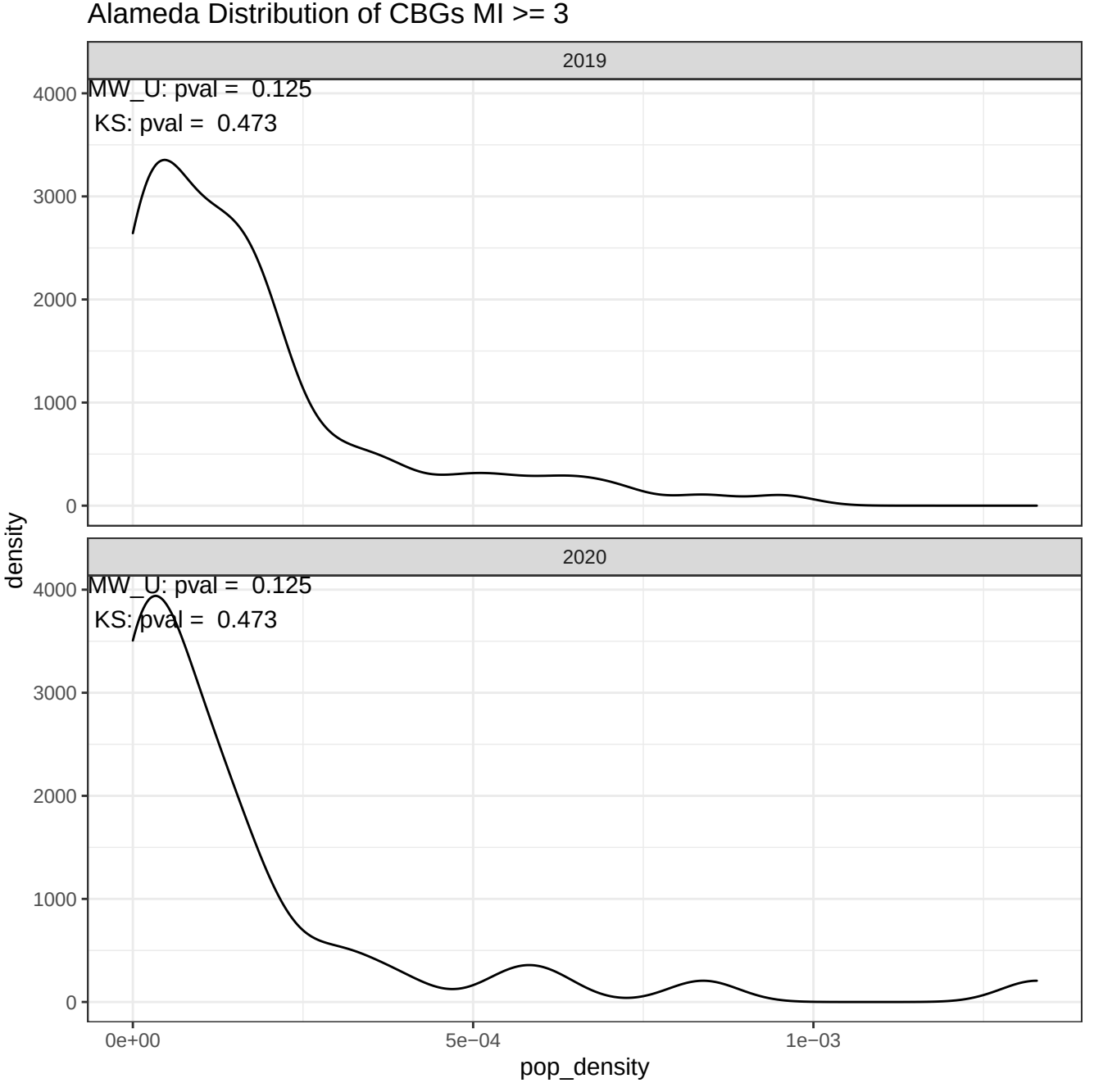

Distribution of Pop Density MI >= 3 (split by County)
06001
06013
06041
06055
06075
06081
06085
06087
06095
06097
pop_density
fips
year
2020.00
2019.75
2019.50
2019.25
2019.00

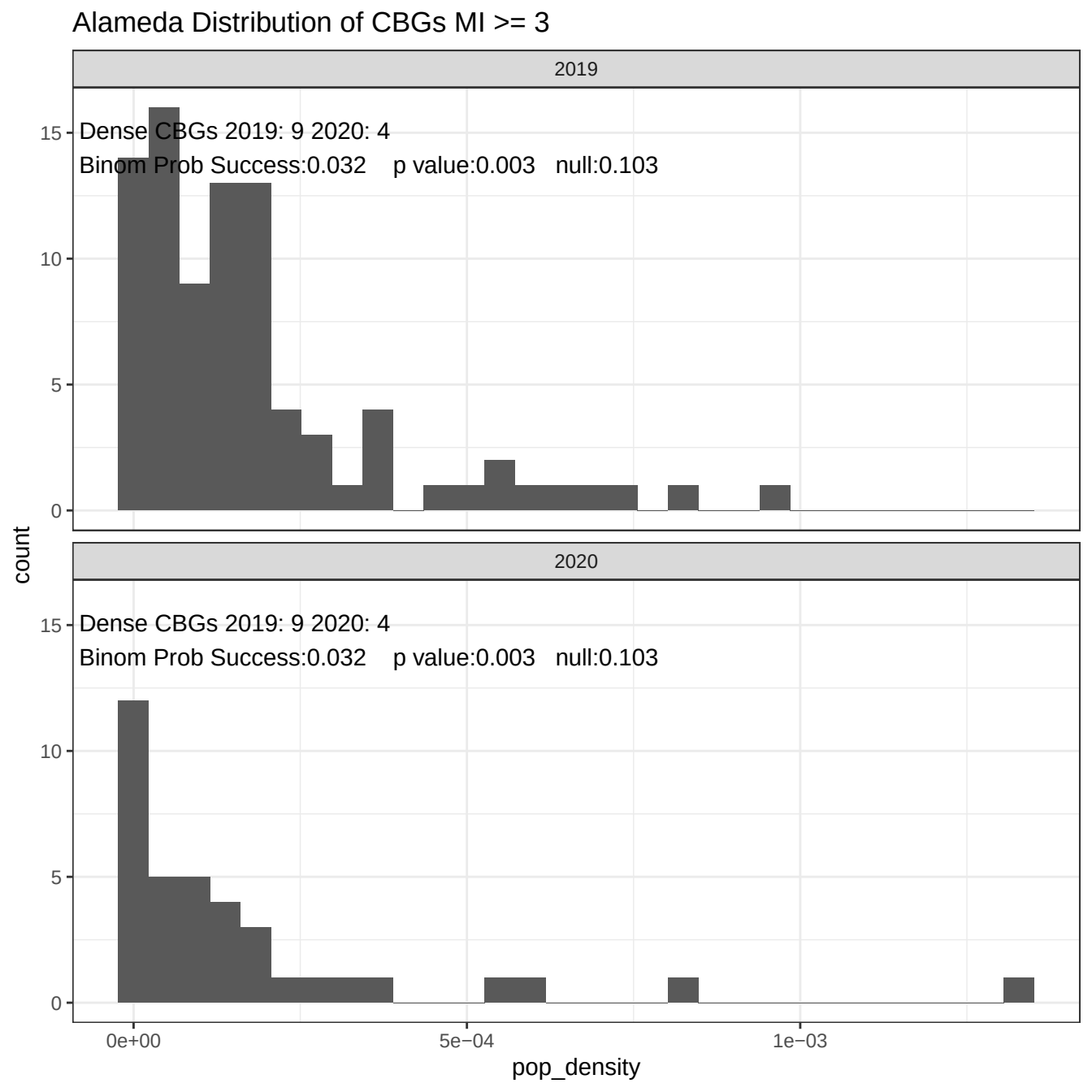

Distribution of Pop Density MI >= 3 (all incl outliers)
MW_U: pval = 0.001
KS: pval = 0.003
pop_density
4
3
2
1
0
06001
06013
06041
06055
06075
06081
06085
06087
06095
06097
fips
year
2020.00
2019.75
2019.50
2019.25
2019.00

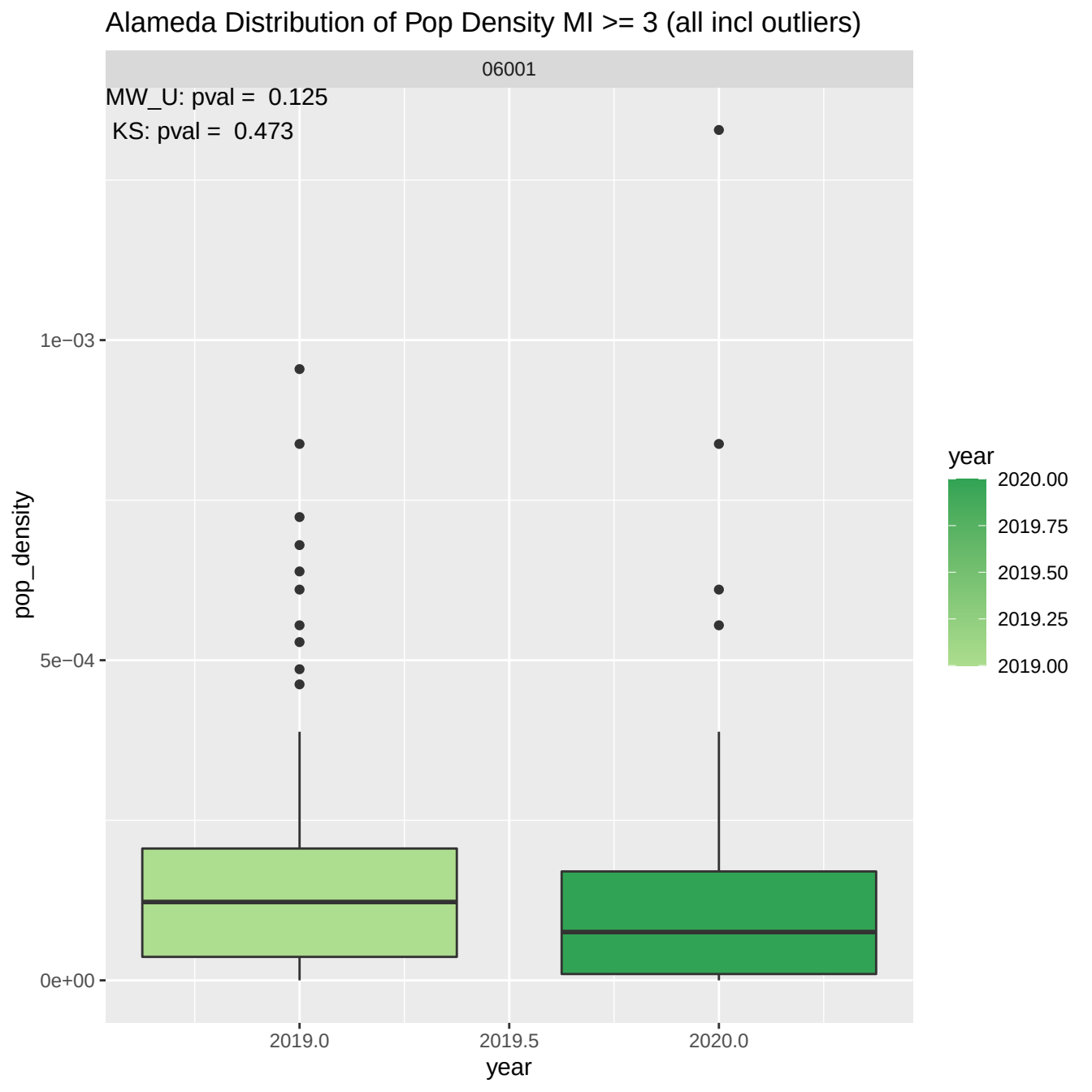

Distribution of Pop Density MI >= 3 (no outliers)
MW_U: pval = 0.001
KS: pval = 0.003
pop_density
0.4
0.3
0.2
0.1
0.0
06001
06013
06041
06055
06075
06081
06085
06087
06095
06097
fips
year
2020.00
2019.75
2019.50
2019.25
2019.00

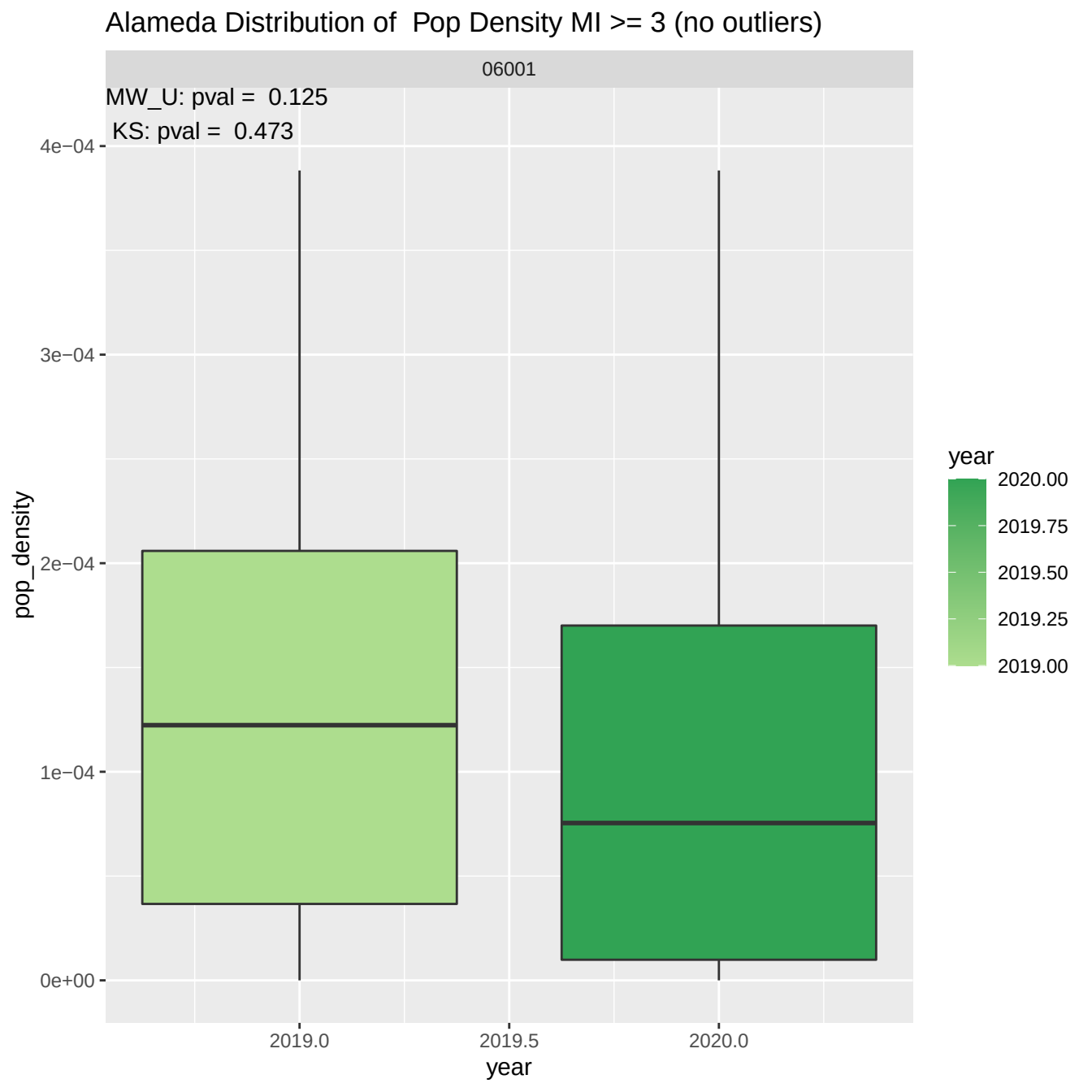

Alameda Summer Mobility Over 34 Degrees
2019
2020
37.9°N
37.8°N
37.7°N
37.6°N
37.5°N
122.2°W
122°W
121.8°W
121.6°W
yvar_cut
(−1,0]
(0,1]
(1,2]
(2,3]
(3,4]
(4,5]
(5,Inf]

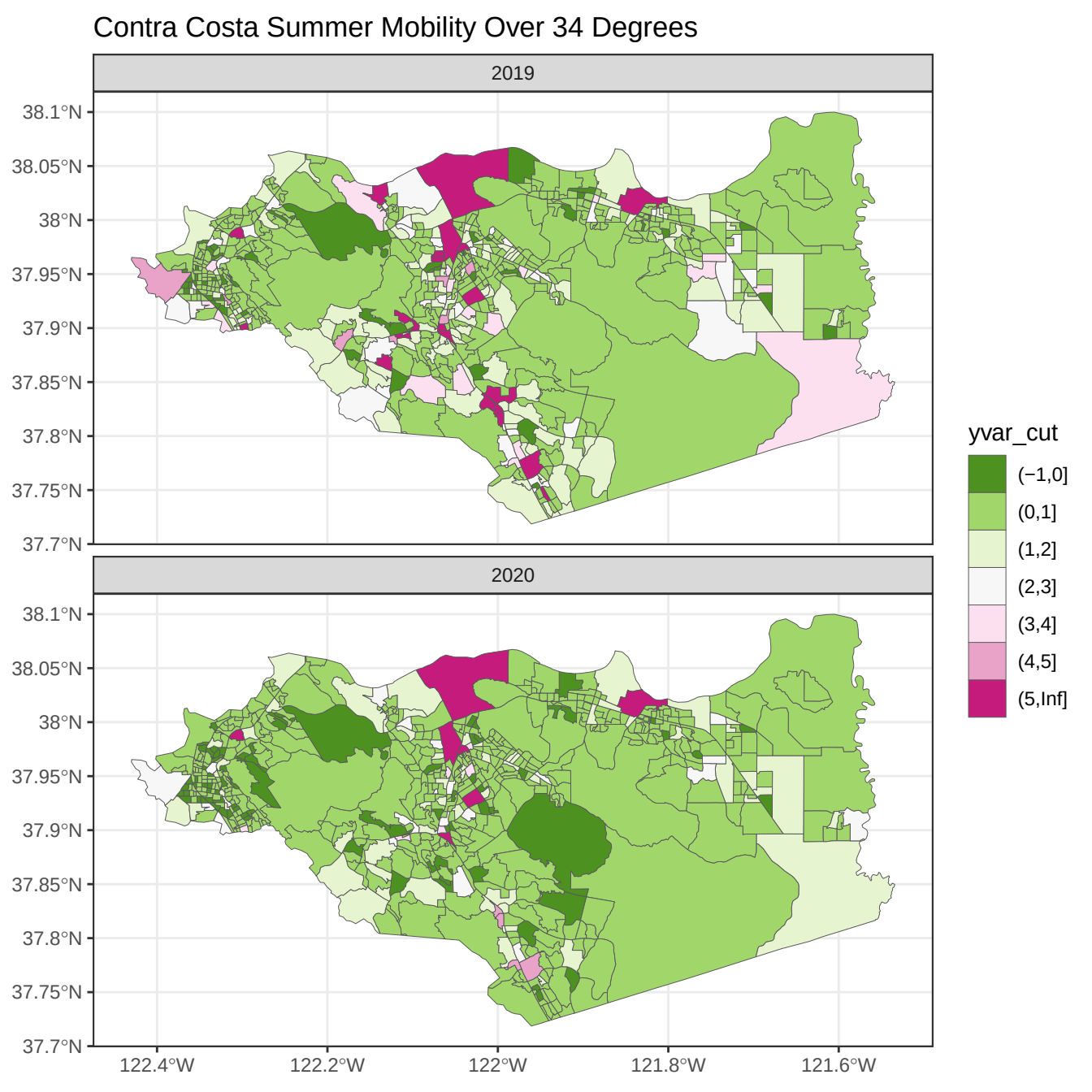

Alameda Summer Mobility Over 34 Degrees & MI >= 3
2019
2020
37.9°N
37.8°N
37.7°N
37.6°N
37.5°N
122.2°W
122°W
121.8°W
121.6°W
yvar
50
40
30
20
10

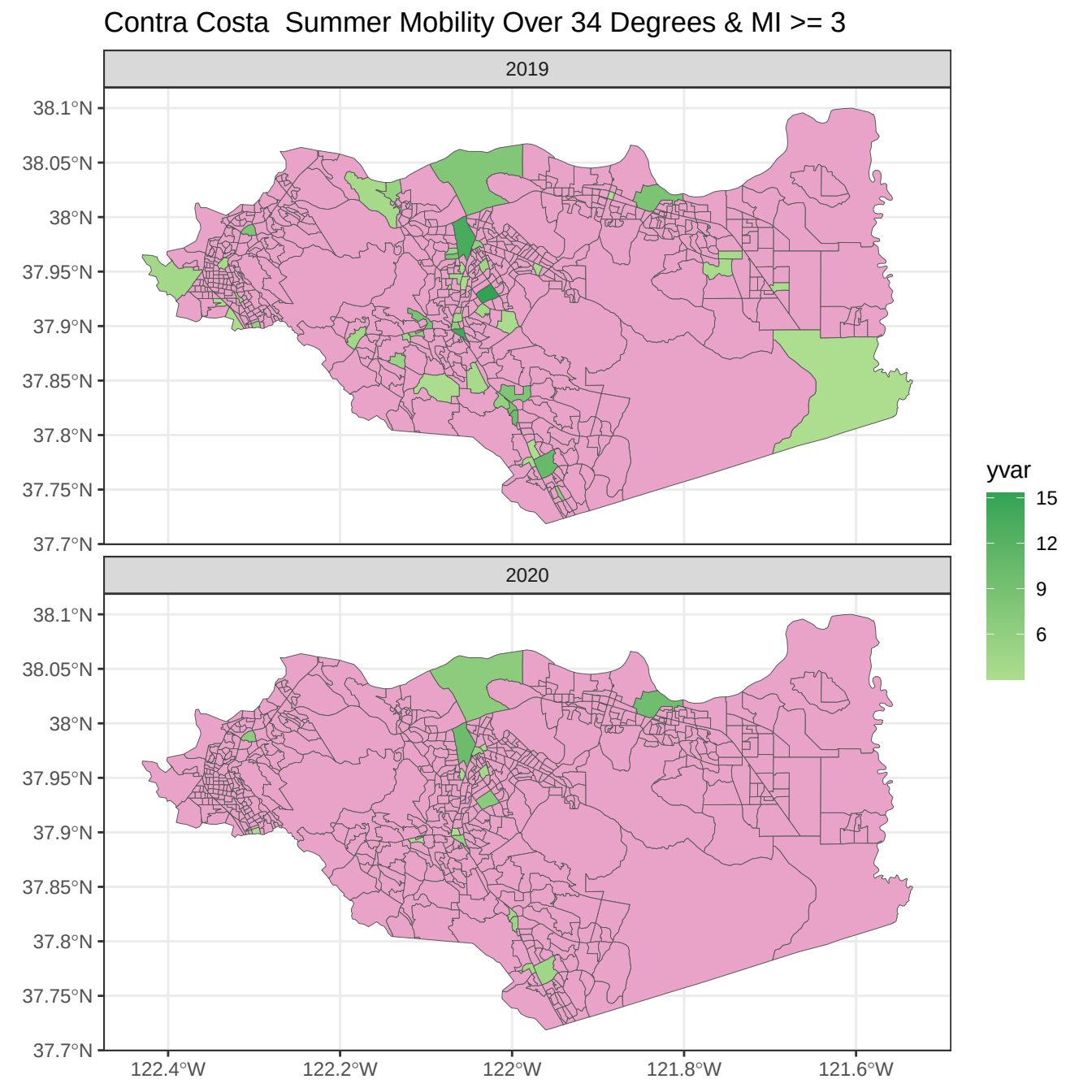

Alameda Distribution of CBGs MI >= 3
2019
MW_U: pval = 0.125
KS: pval = 0.473
2020
MW_U: pval = 0.125
KS: pval = 0.473
density
4000
3000
2000
1000
0
0e+00
5e−04
1e−03
pop_density

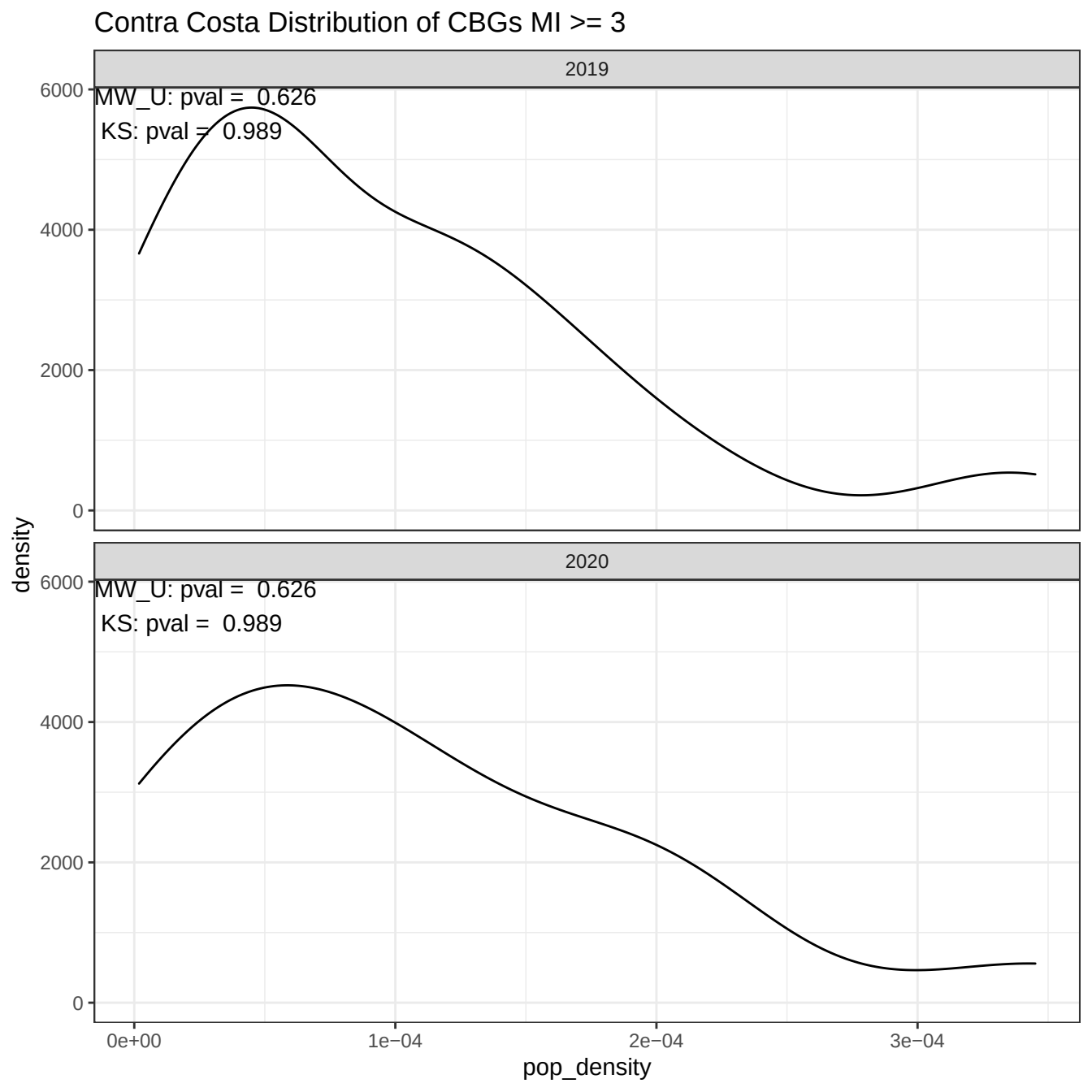

Alameda Distribution of CBGs MI >= 3
2019
Dense CBGs 2019: 9 2020: 4
Binom Prob Success:0.032 p value:0.003 null:0.103
2020
Dense CBGs 2019: 9 2020: 4
Binom Prob Success:0.032 p value:0.003 null:0.103
count
0
5
10
15
0e+00
5e−04
1e−03
pop_density

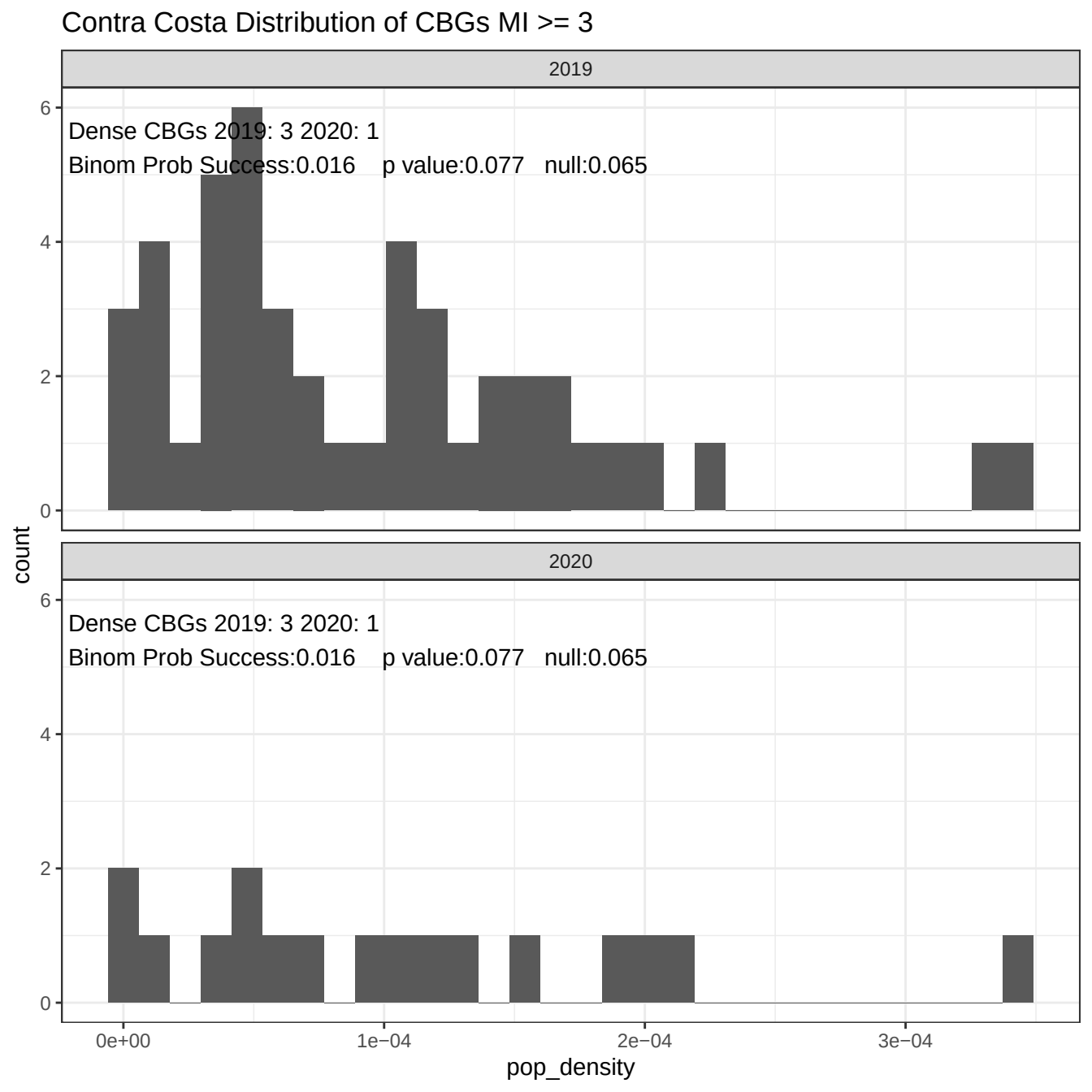

Alameda Distribution of Pop Density MI >= 3 (all incl outliers)
06001
MW_U: pval = 0.125
KS: pval = 0.473
1e−03
5e−04
0e+00
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

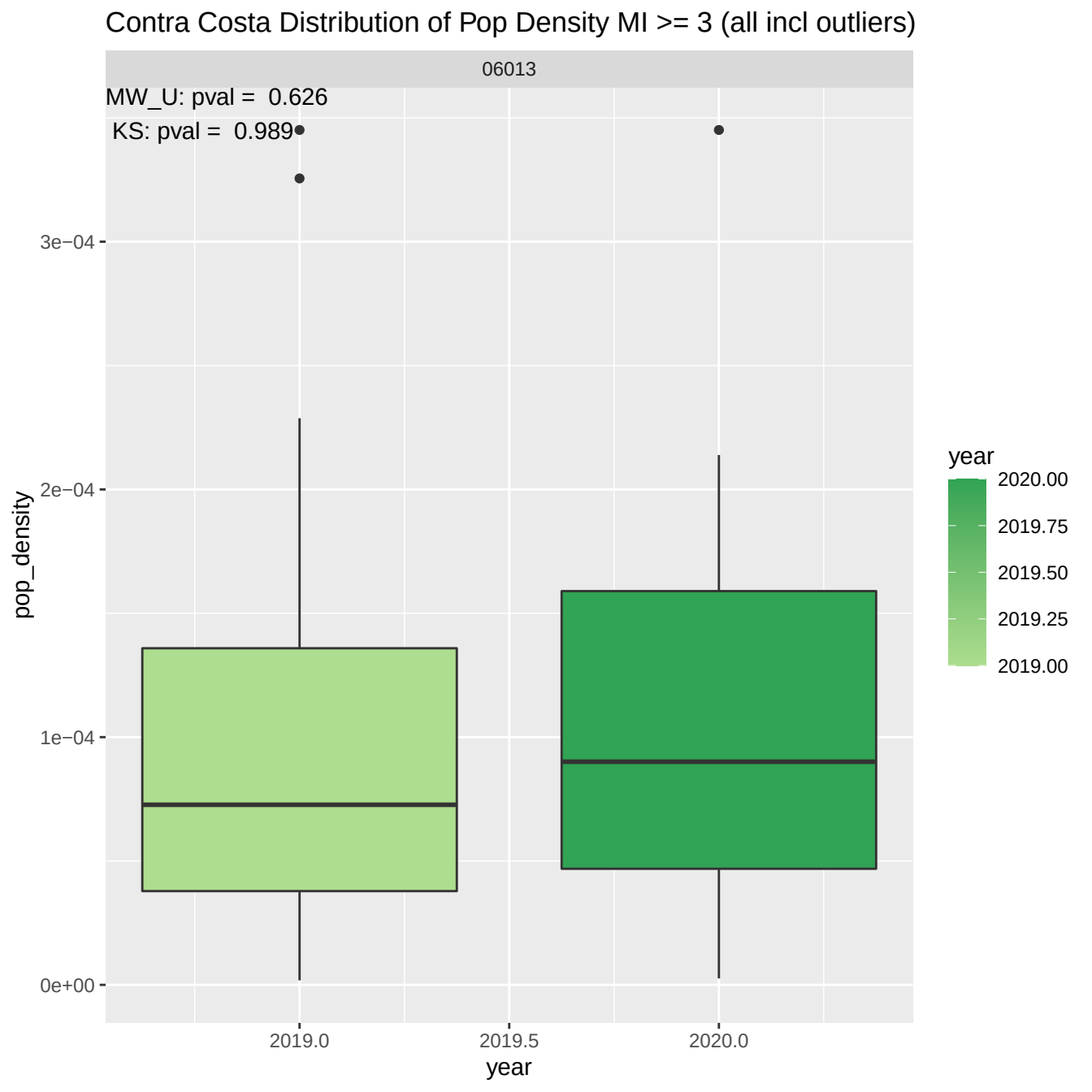

Alameda Distribution of Pop Density MI >= 3 (no outliers)
06001
MW_U: pval = 0.125
KS: pval = 0.473
4e−04
3e−04
2e−04
1e−04
0e+00
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

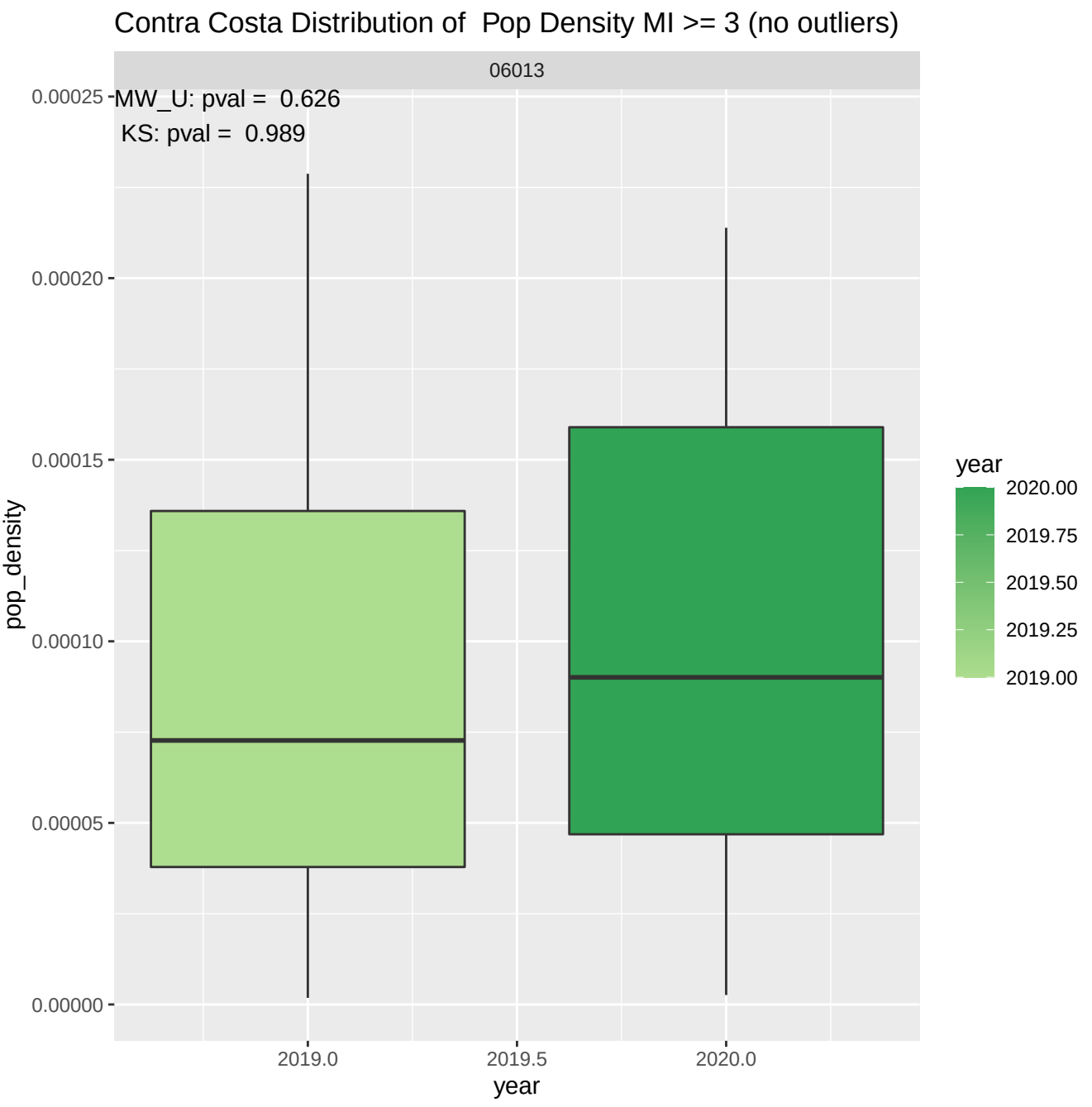

Contra Costa Summer Mobility Over 34 Degrees
2019
2020
38.1°N
38.05°N
38°N
37.95°N
37.9°N
37.85°N
37.8°N
37.75°N
37.7°N
122.4°W
122.2°W
122°W
121.8°W
121.6°W
yvar_cut
(−1,0]
(0,1]
(1,2]
(2,3]
(3,4]
(4,5]
(5,Inf]


Contra Costa Summer Mobility Over 34 Degrees & MI >= 3
2019
2020
38.1°N
38.05°N
38°N
37.95°N
37.9°N
37.85°N
37.8°N
37.75°N
37.7°N
122.4°W
122.2°W
122°W
121.8°W
121.6°W
yvar
15
12
9
6

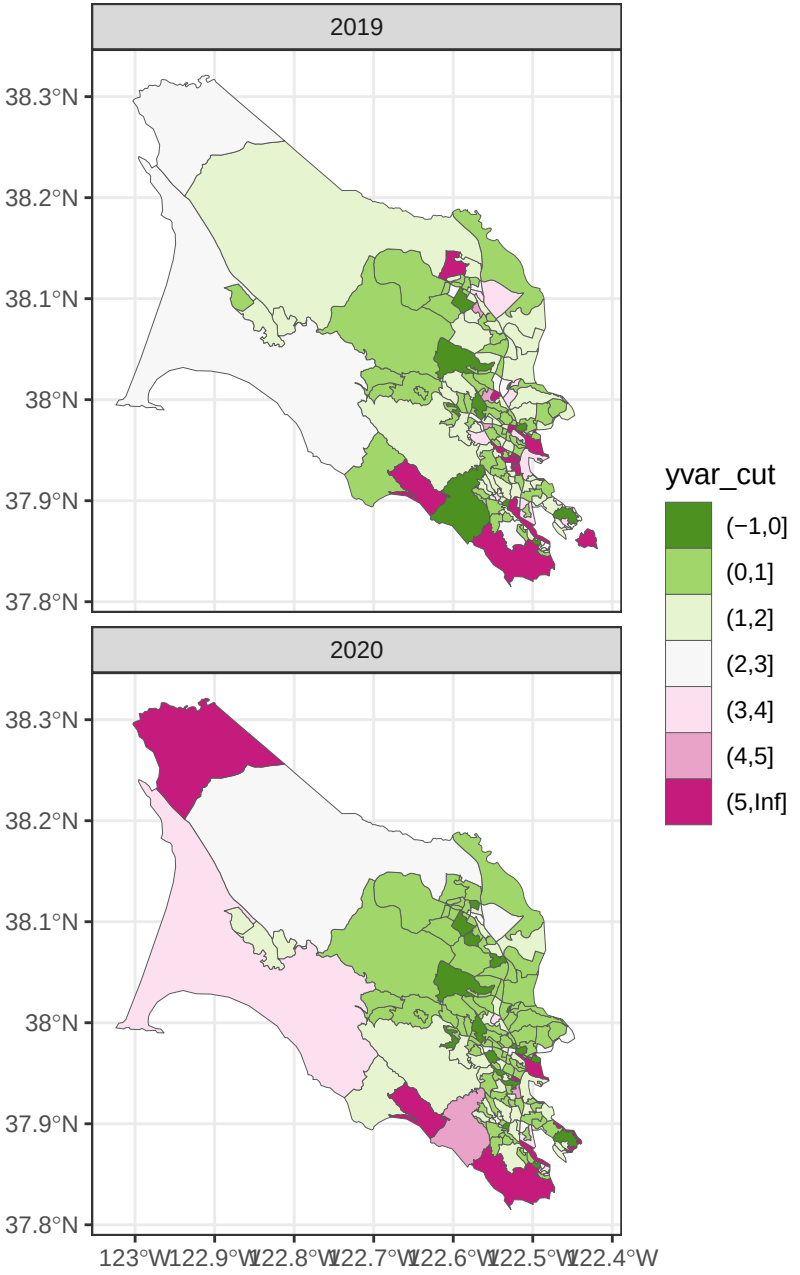

Contra Costa Distribution of CBGs MI >= 3
2019
MW_U: pval = 0.626
KS: pval = 0.989
2020
MW_U: pval = 0.626
KS: pval = 0.989
density
6000
4000
2000
0
0e+00
1e−04
2e−04
3e−04
pop_density

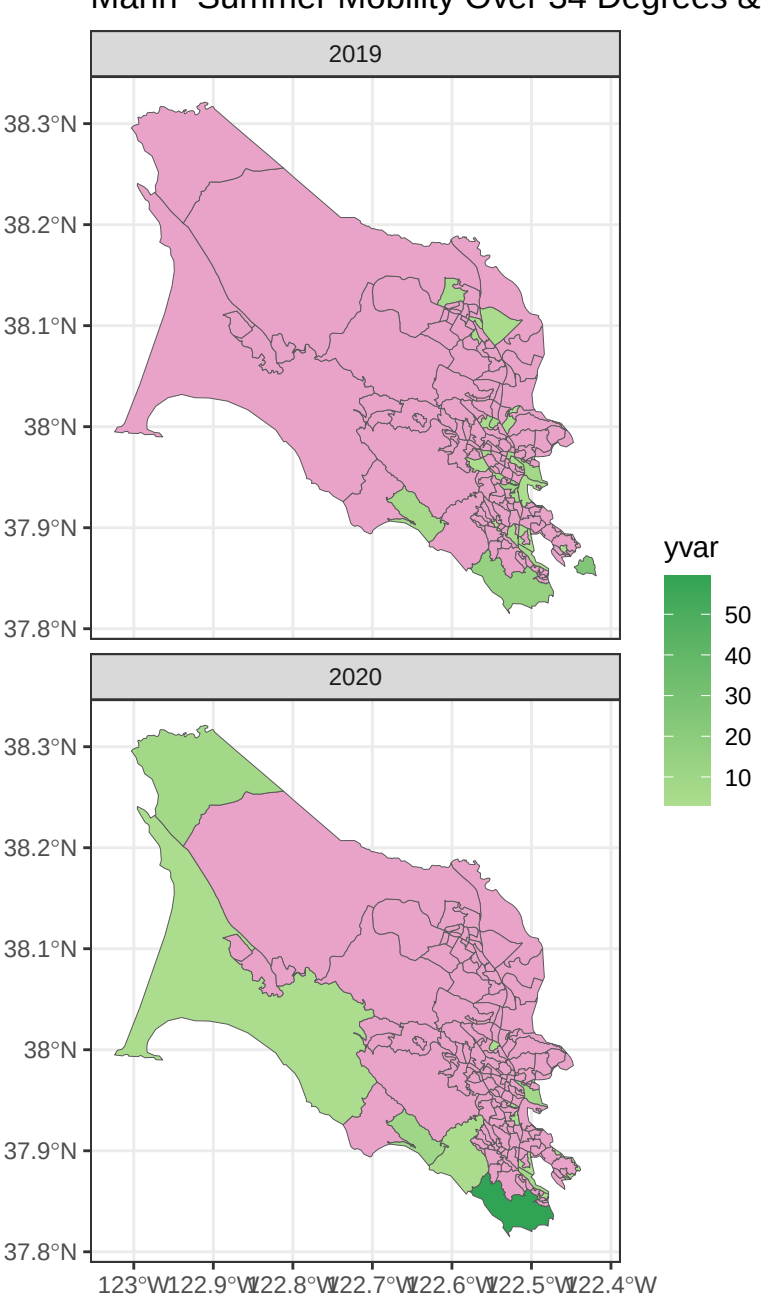

Contra Costa Distribution of CBGs MI >= 3
2019
Dense CBGs 2019: 3 2020: 1
Binom Prob Success:0.016 p value:0.077 null:0.065
2020
Dense CBGs 2019: 3 2020: 1
Binom Prob Success:0.016 p value:0.077 null:0.065
count
0
2
4
6
0e+00
1e−04
2e−04
3e−04
pop_density

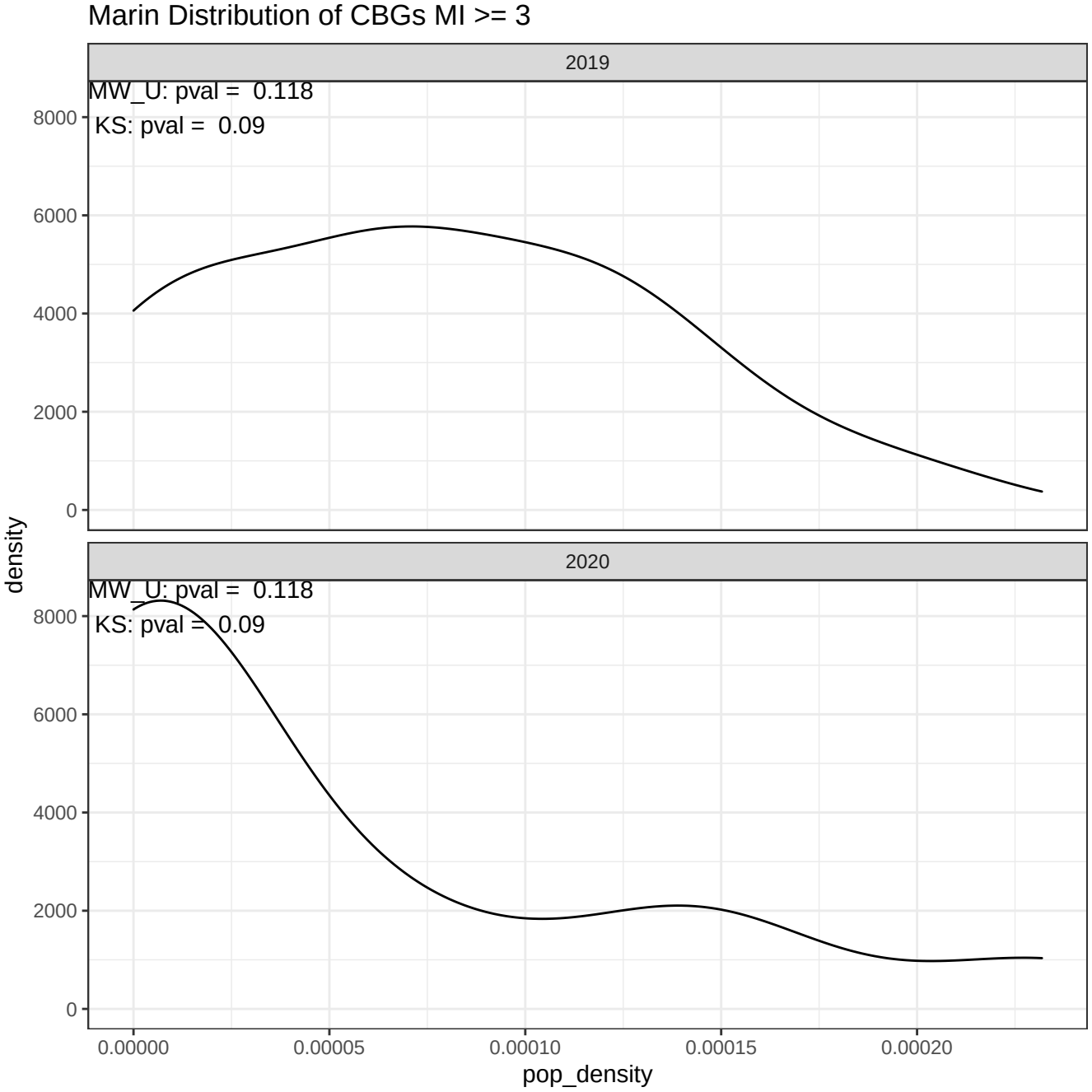

Contra Costa Distribution of Pop Density MI >= 3 (all incl outliers)
06013
MW_U: pval = 0.626
KS: pval = 0.989
3e−04
2e−04
1e−04
0e+00
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

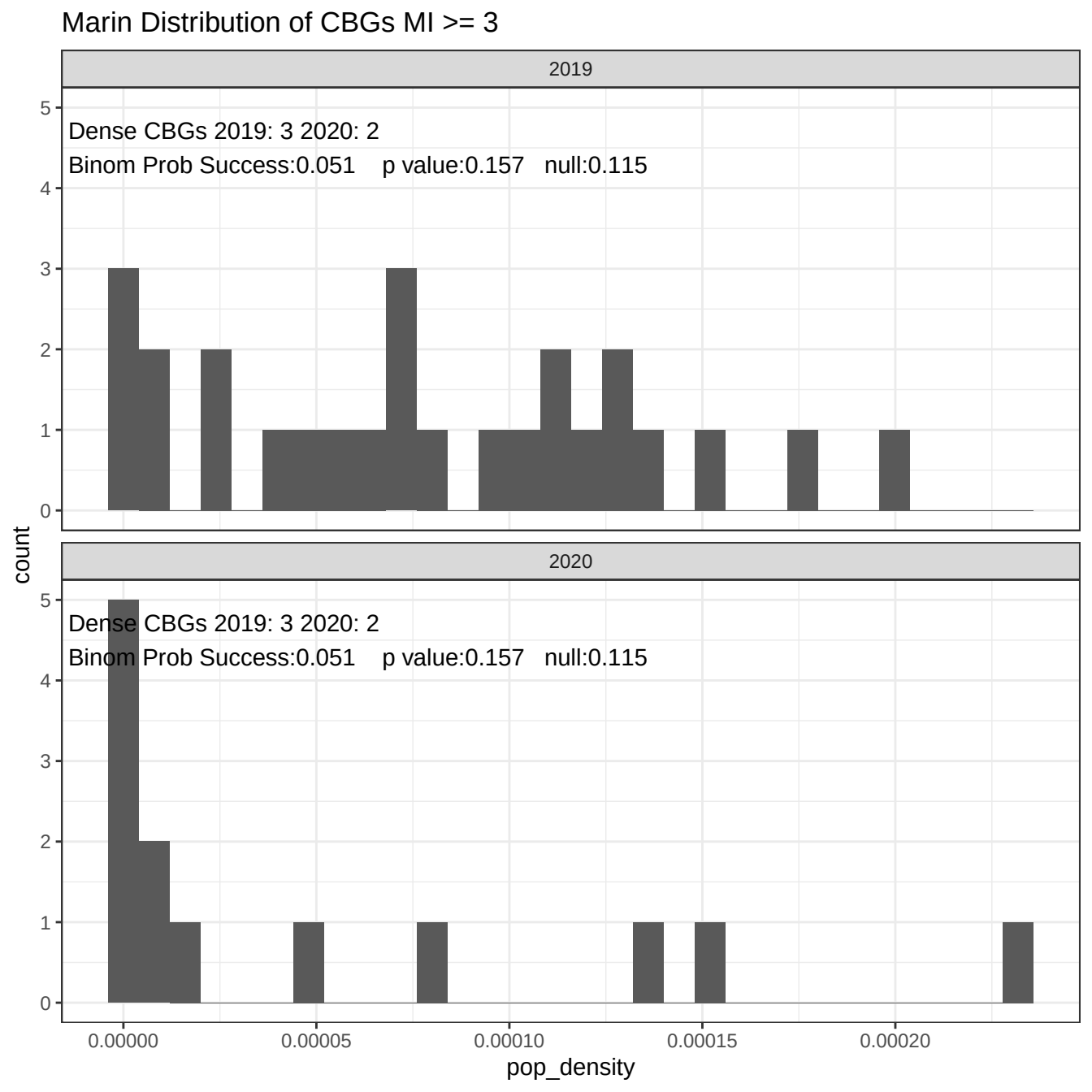

Contra Costa Distribution of Pop Density MI >= 3 (no outliers)
06013
MW_U: pval = 0.626
KS: pval = 0.989
0.00025
0.00020
0.00015
0.00010
0.00005
0.00000
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

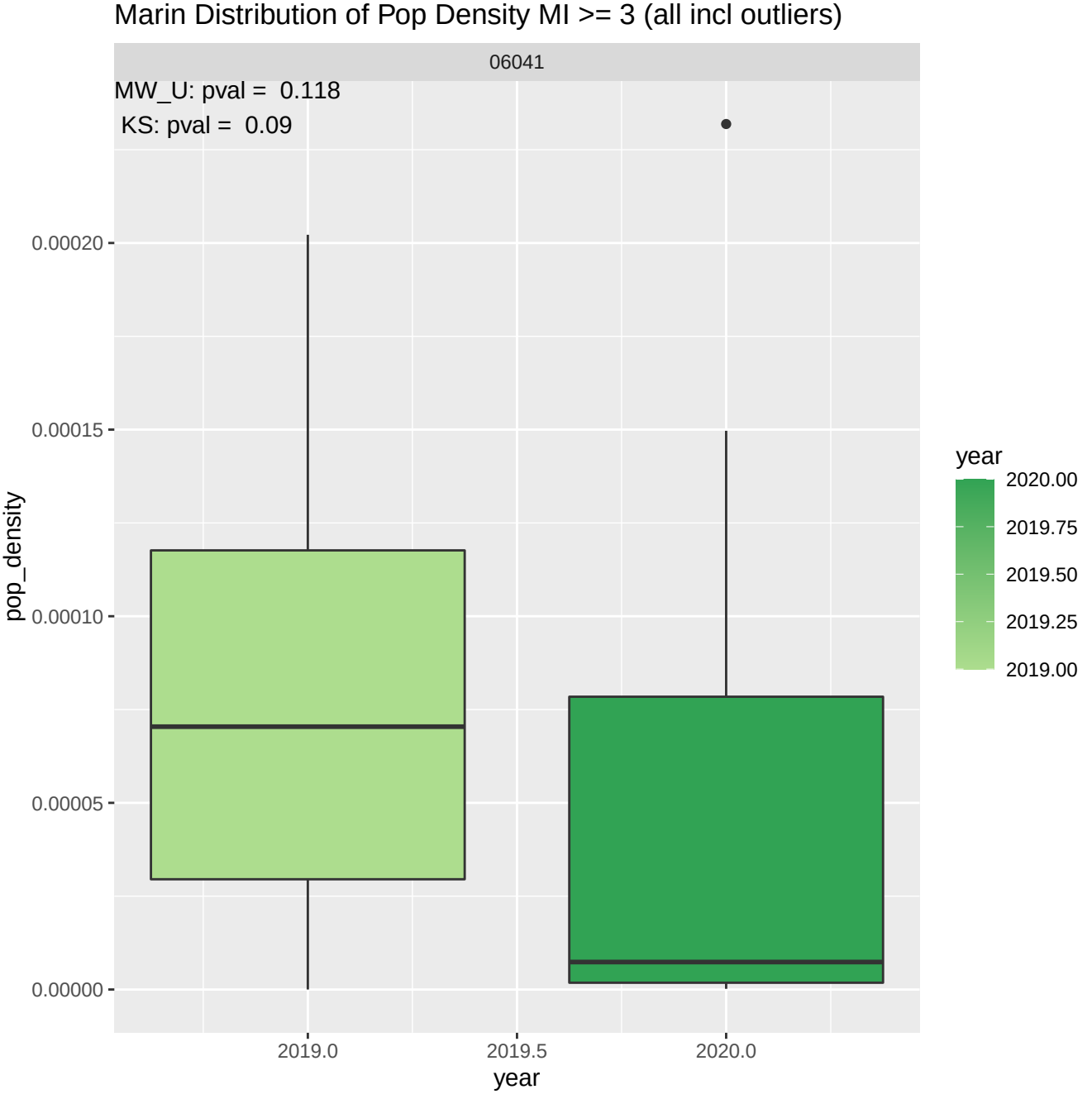
Marin Summer Mobility Over 34 Degrees

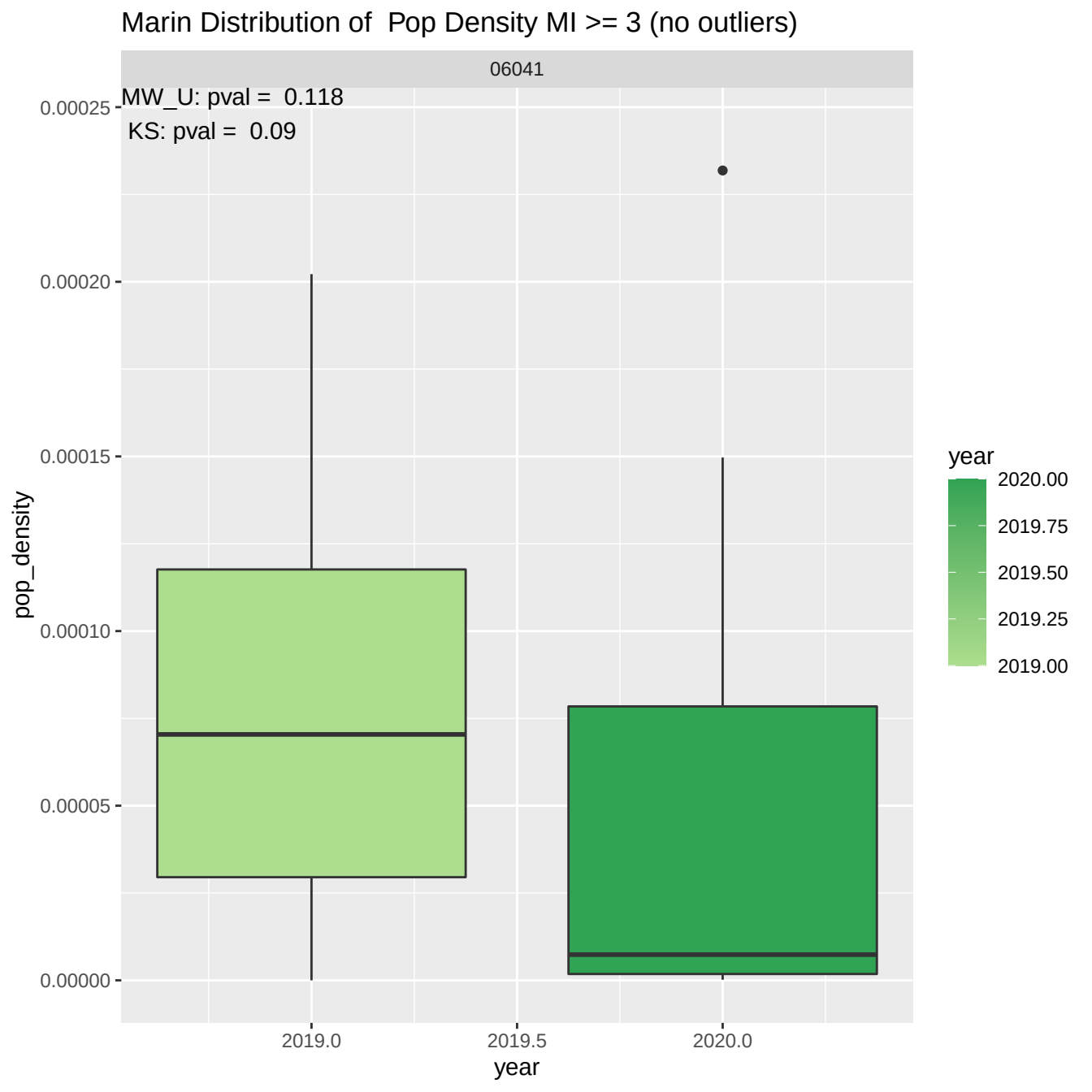



Marin Summer Mobility Over 34 Degrees & MI >= 3
2019
2020
38.3°N
38.2°N
38.1°N
38°N
37.9°N
37.8°N
123°W
122.9°W
122.8°W
122.7°W
122.6°W
122.5°W
122.4°W
yvar
50
40
30
20
10

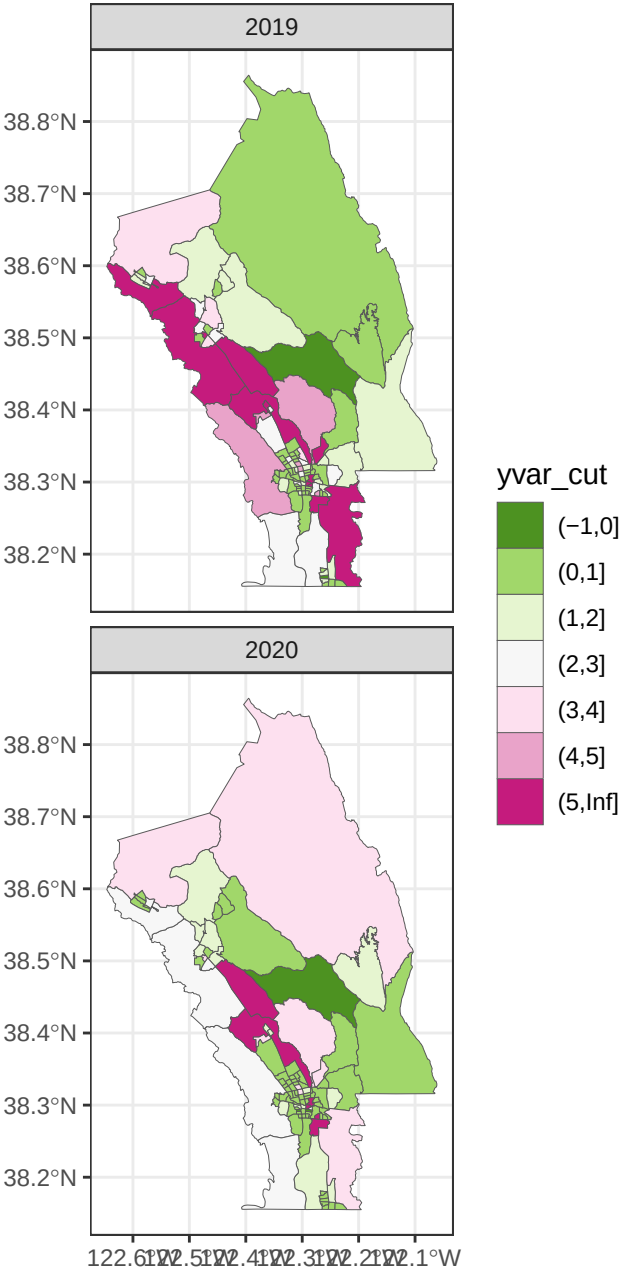

Marin Distribution of CBGs MI >= 3
2019
MW_U: pval = 0.118
KS: pval = 0.09
2020
MW_U: pval = 0.118
KS: pval = 0.09
density
pop_density
0
2000
4000
6000
8000
0.00000
0.00005
0.00010
0.00015
0.00020


Marin Distribution of CBGs MI >= 3
2019
Dense CBGs 2019: 3 2020: 2
Binom Prob Success:0.051 p value:0.157 null:0.115
2020
Dense CBGs 2019: 3 2020: 2
Binom Prob Success:0.051 p value:0.157 null:0.115
count
pop_density
0.00000
0.00005
0.00010
0.00015
0.00020

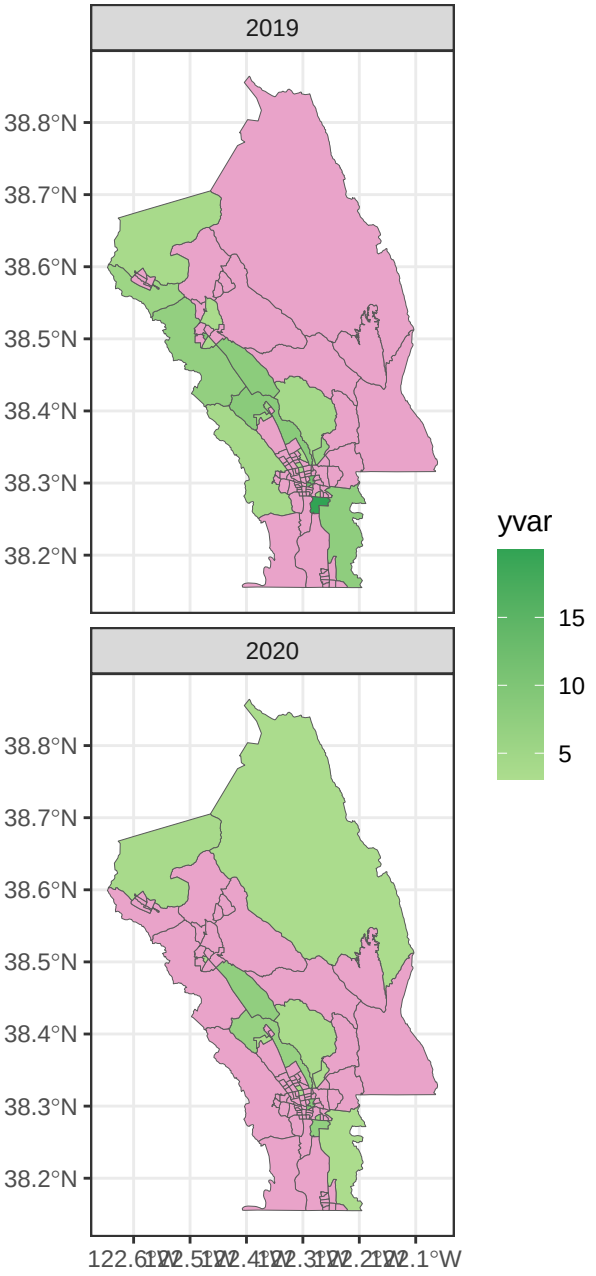

Marin Distribution of Pop Density MI >= 3 (all incl outliers)
06041
MW_U: pval = 0.118
KS: pval = 0.09
0.00020
0.00015
0.00010
0.00005
0.00000
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

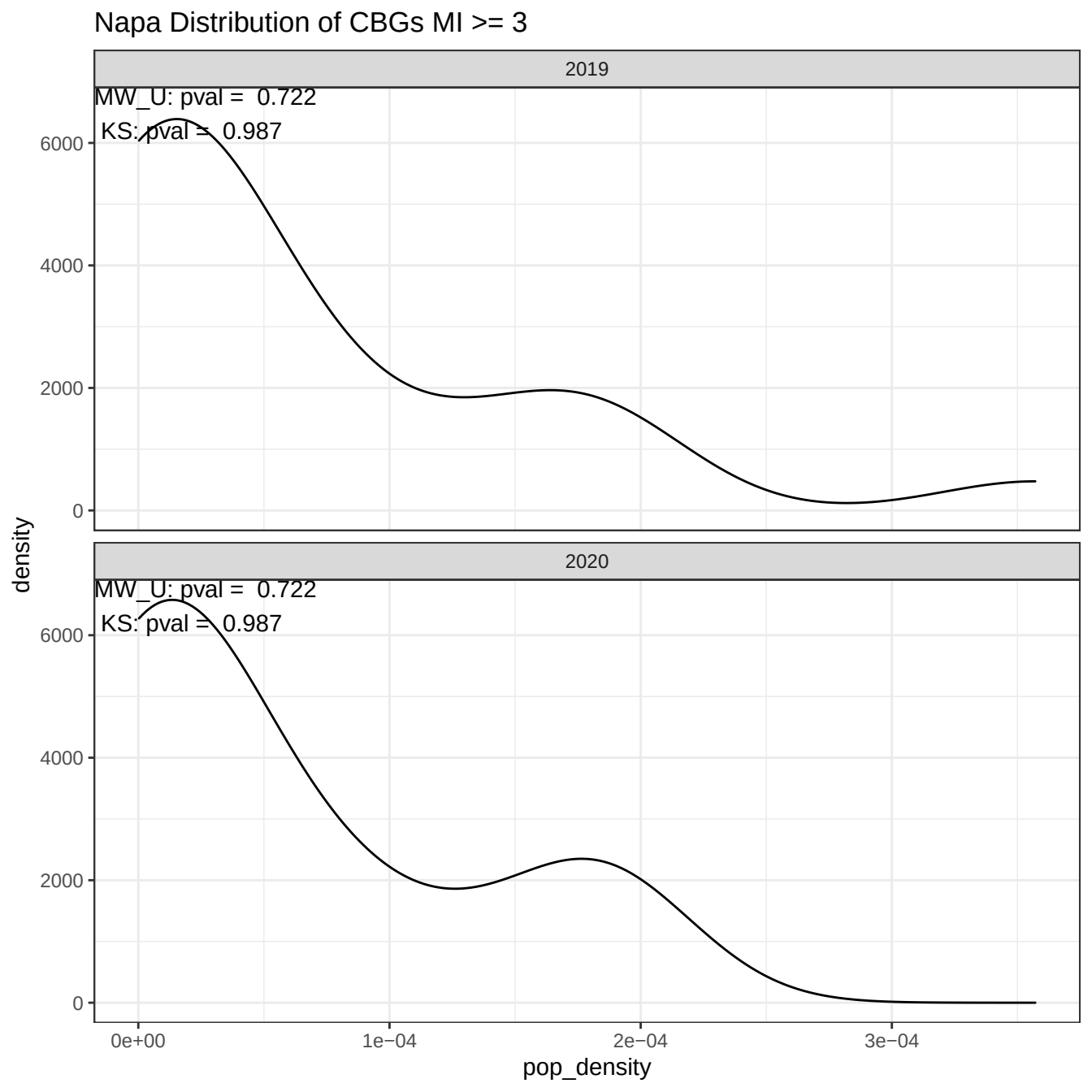

Marin Distribution of Pop Density MI >= 3 (no outliers)
06041
MW_U: pval = 0.118
KS: pval = 0.09
0.00025
0.00020
0.00015
0.00010
0.00005
0.00000
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

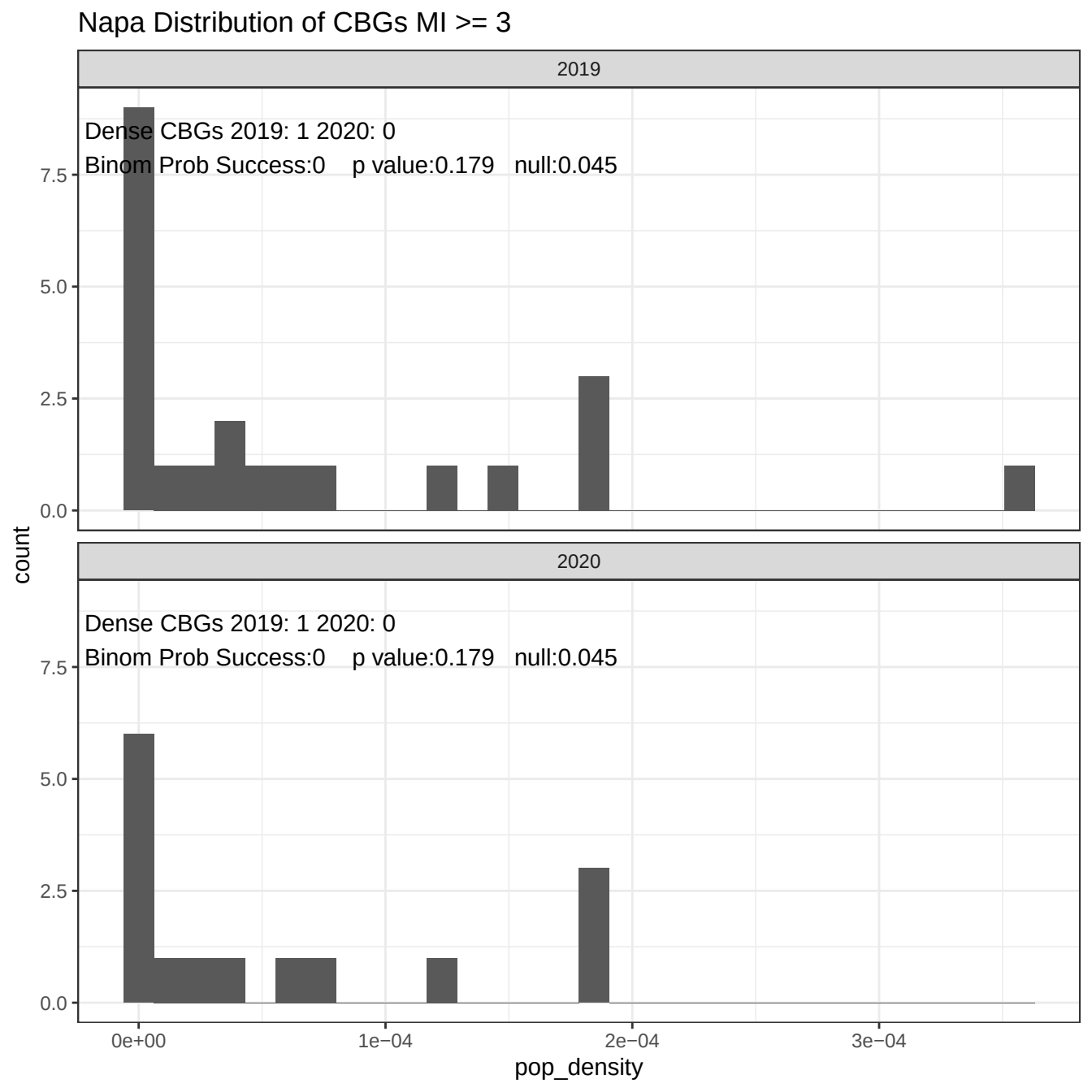
Napa Summer Mobility Over 34 Degrees

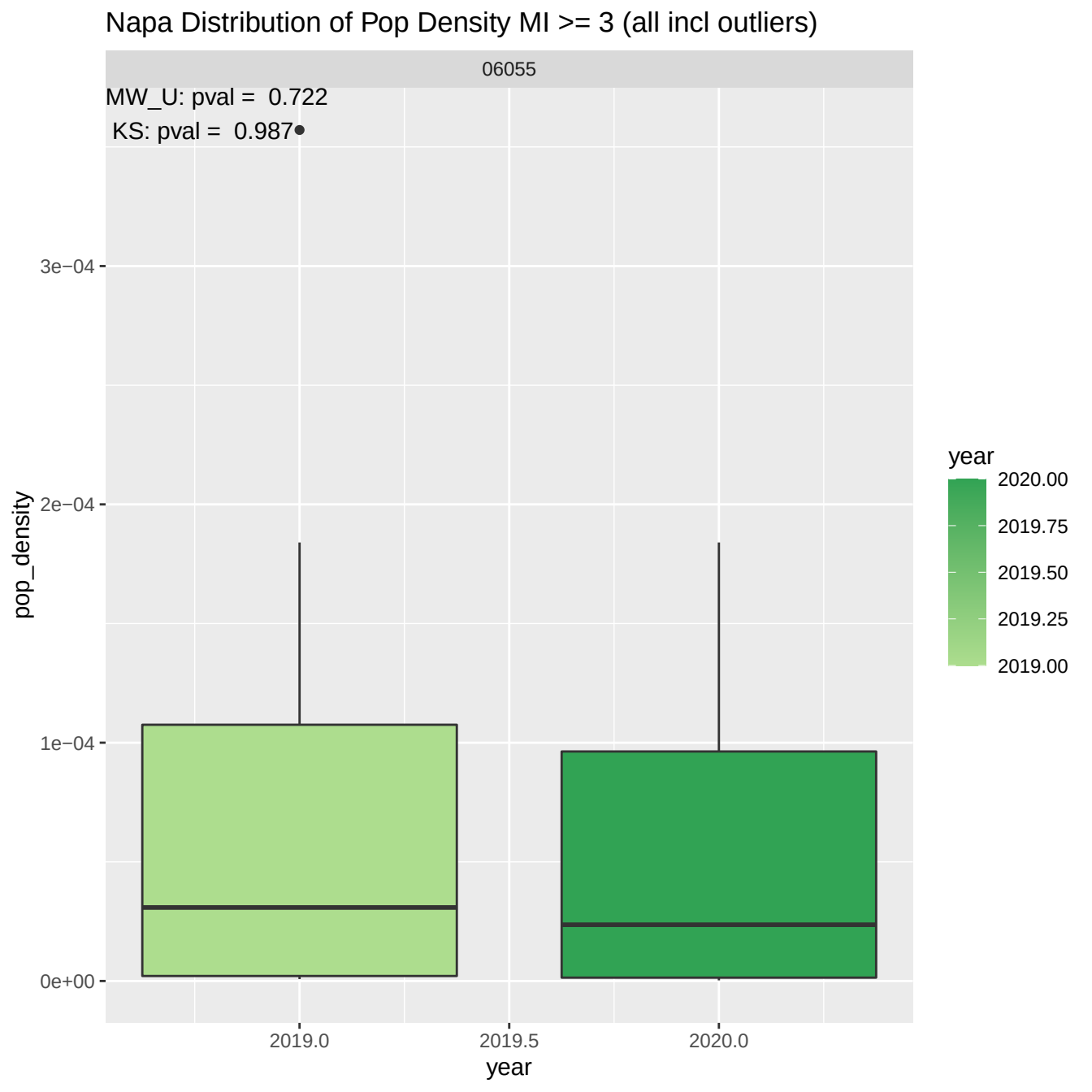


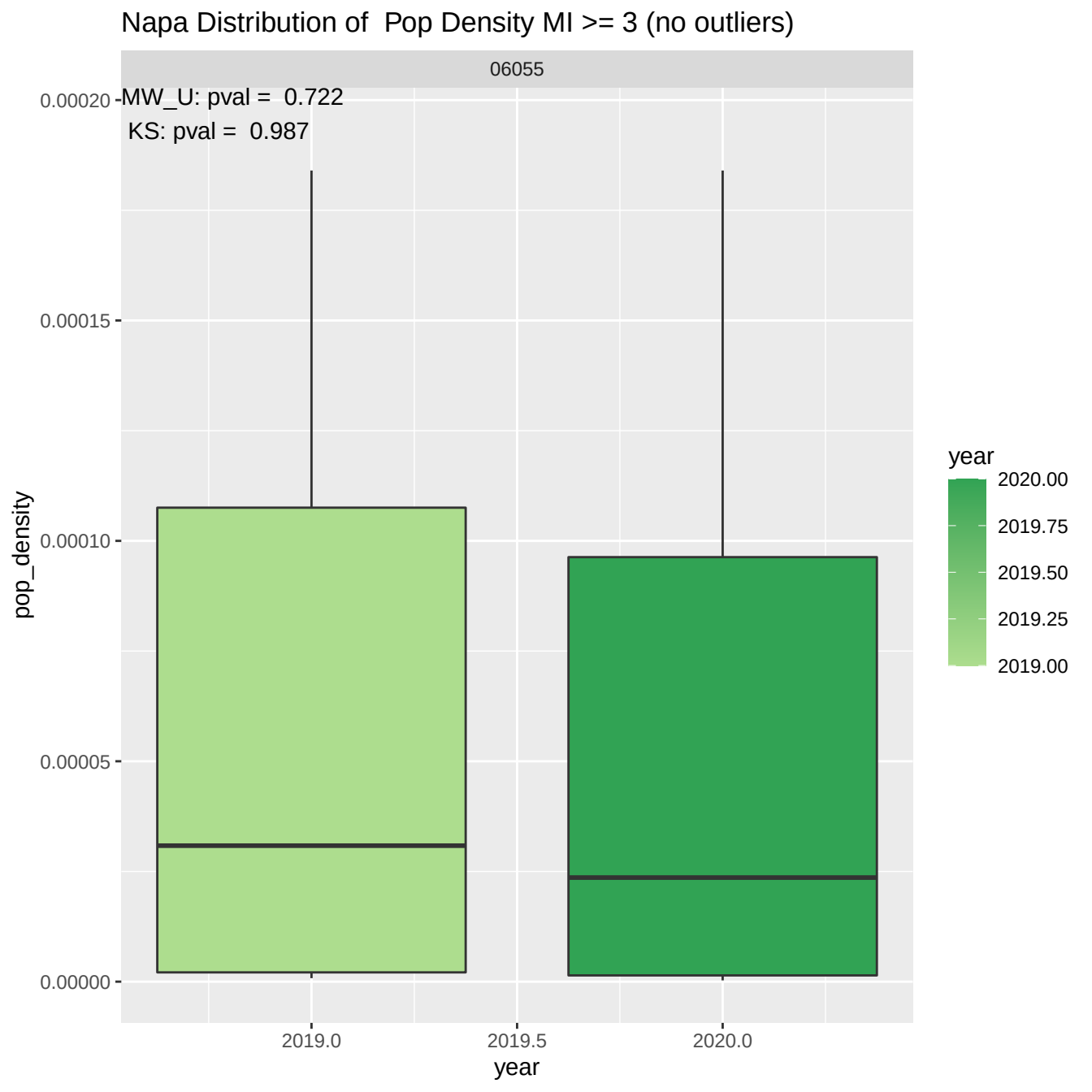
Napa Summer Mobility Over 34 Degrees & MI >= 3

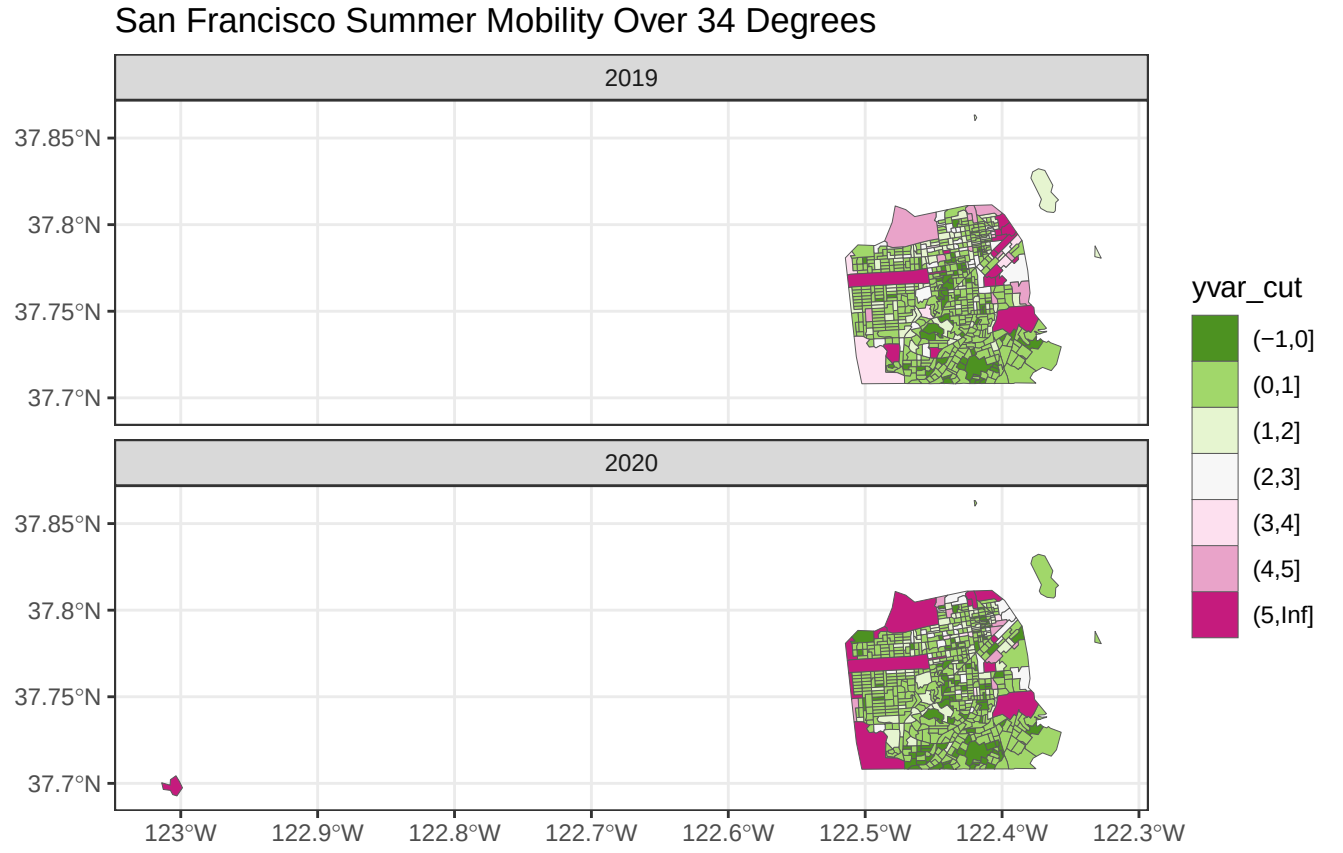


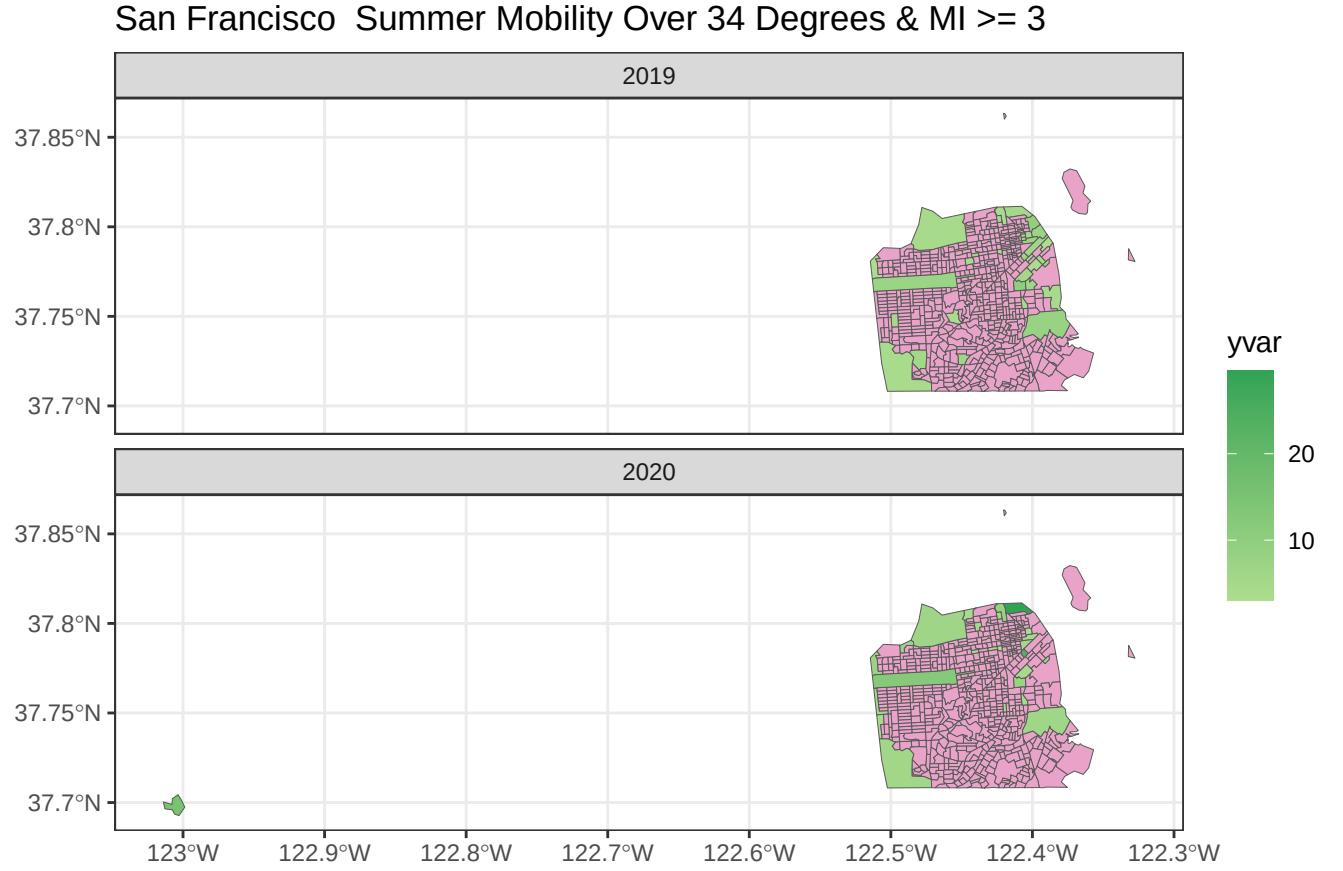

Napa Distribution of CBGs MI >= 3
2019
MW_U: pval = 0.722
KS: pval = 0.987
2020
MW_U: pval = 0.722
KS: pval = 0.987
density
6000
4000
2000
0
0e+00
1e−04
2e−04
3e−04
pop_density

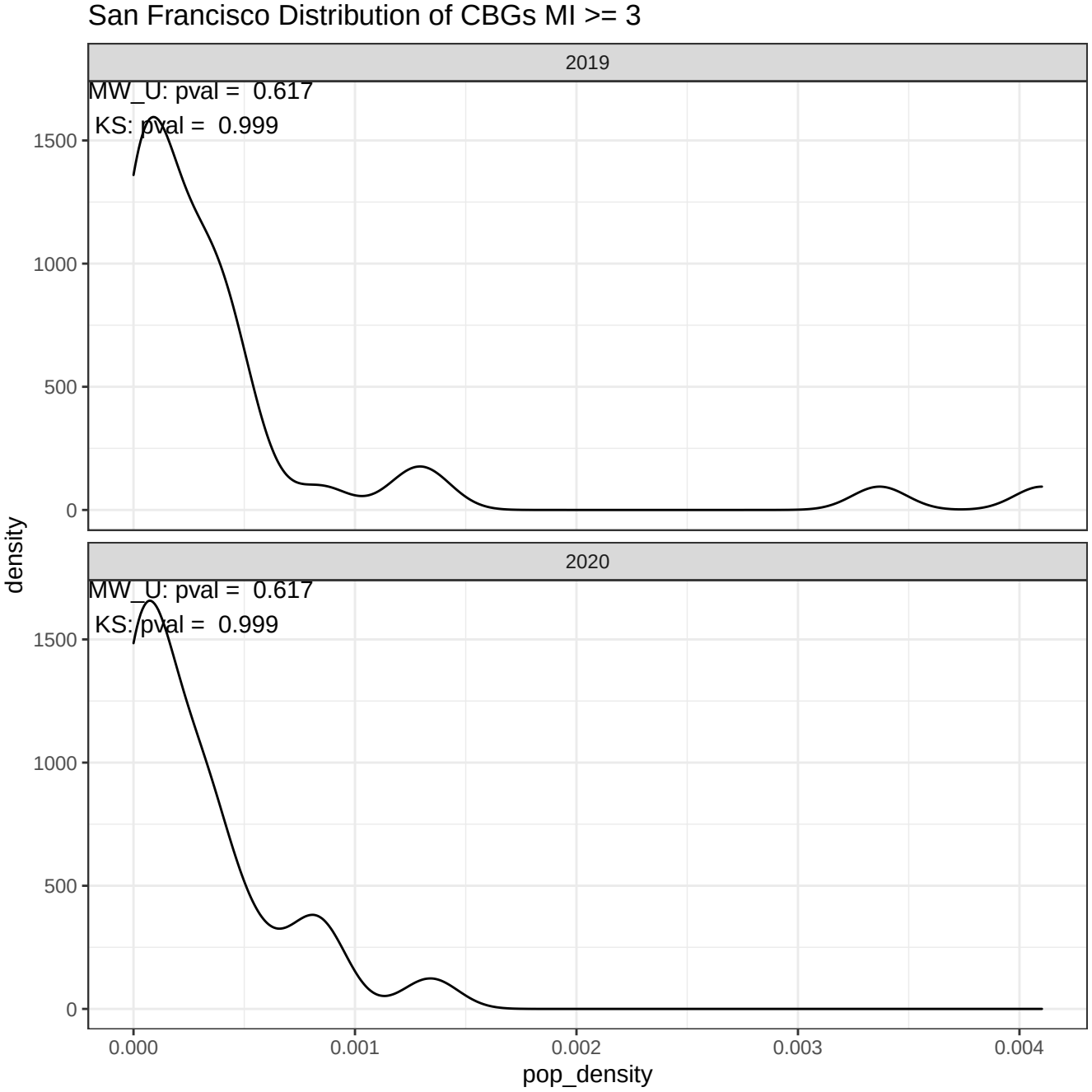

Napa Distribution of CBGs MI >= 3
2019
Dense CBGs 2019: 1 2020: 0
Binom Prob Success:0 p value:0.179 null:0.045
2020
Dense CBGs 2019: 1 2020: 0
Binom Prob Success:0 p value:0.179 null:0.045
count
pop_density
0e+00
1e−04
2e−04
3e−04
0.0
2.5
5.0
7.5

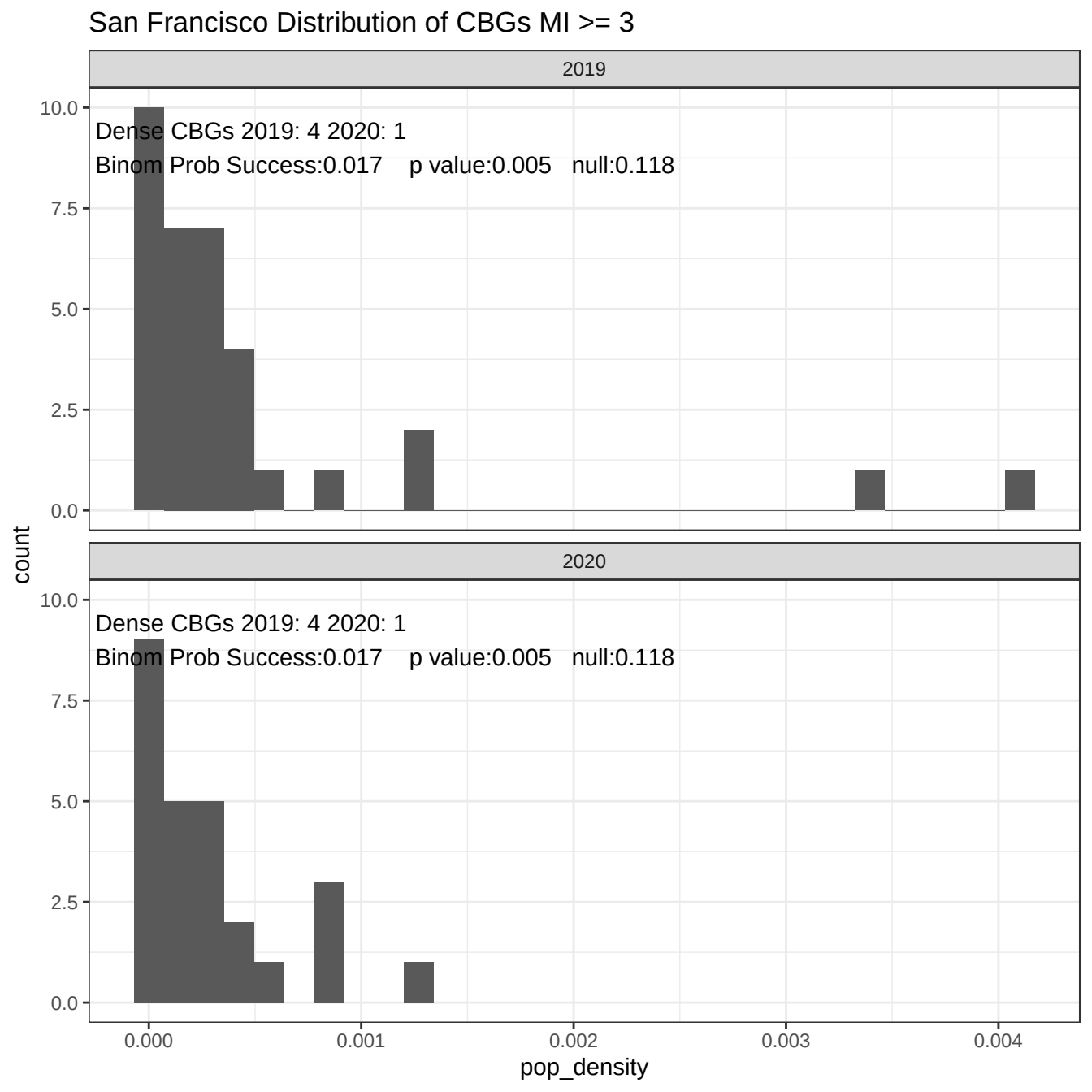

Napa Distribution of Pop Density MI >= 3 (all incl outliers)
06055
MW_U: pval = 0.722
KS: pval = 0.987
3e−04
2e−04
1e−04
0e+00
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

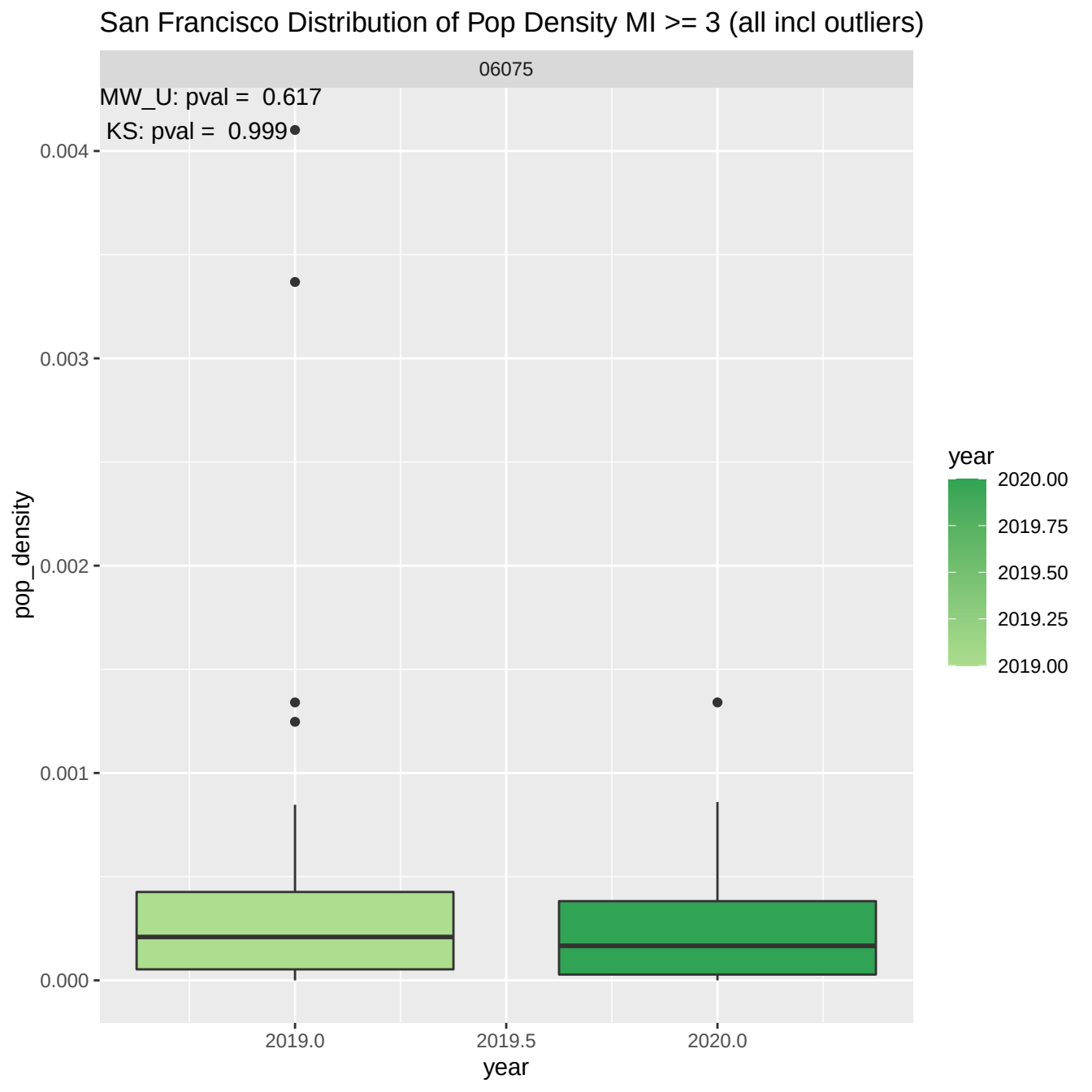

Napa Distribution of Pop Density MI >= 3 (no outliers)
06055
MW_U: pval = 0.722
KS: pval = 0.987
0.00020
0.00015
0.00010
0.00005
0.00000
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

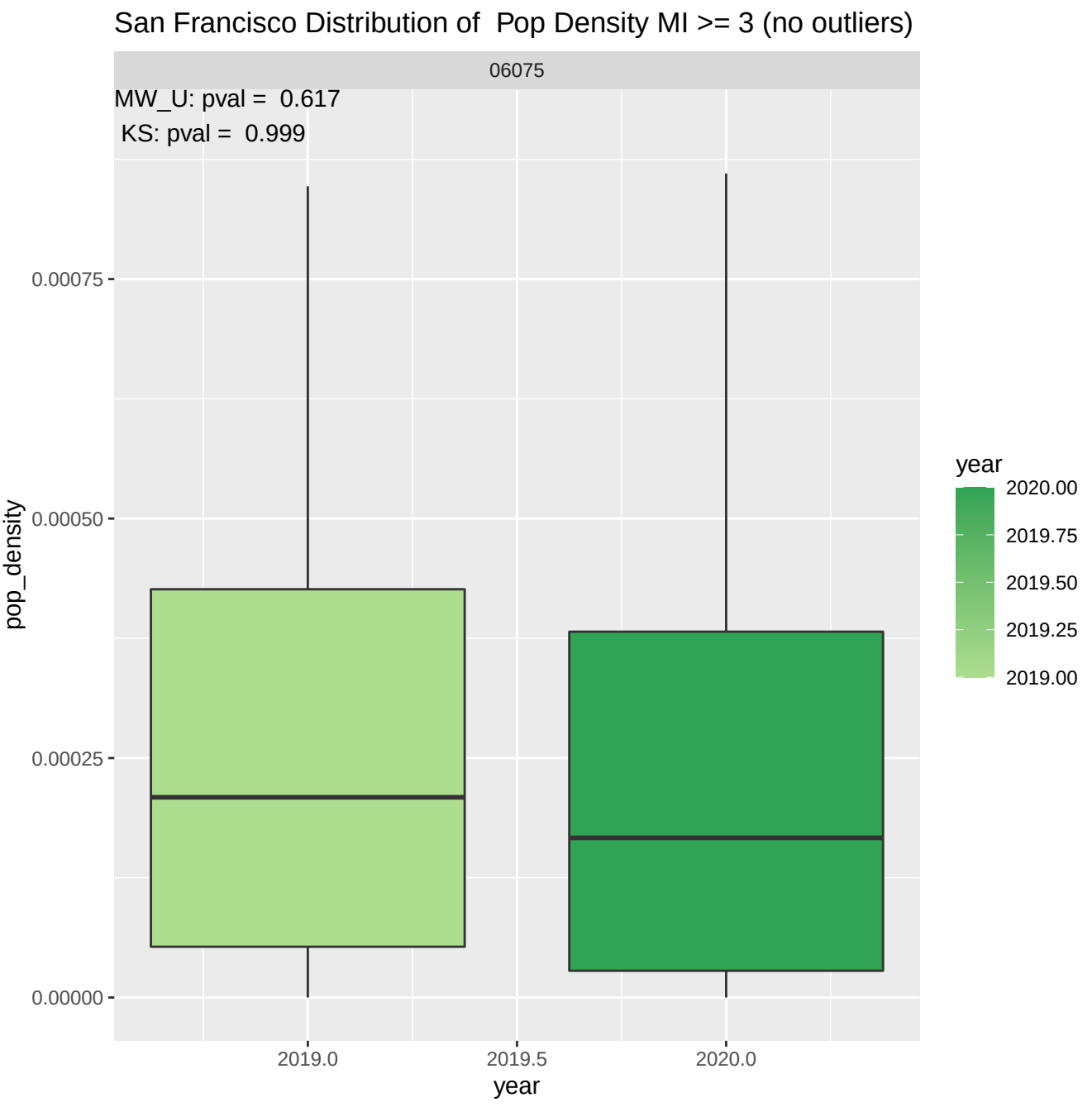

San Francisco Summer Mobility Over 34 Degrees
2019
2020
37.85°N
37.8°N
37.75°N
37.7°N
123°W
122.9°W
122.8°W
122.7°W
122.6°W
122.5°W
122.4°W
122.3°W
yvar_cut
(−1,0]
(0,1]
(1,2]
(2,3]
(3,4]
(4,5]
(5,Inf]


San Francisco Summer Mobility Over 34 Degrees & MI >= 3
2019
2020
37.85°N
37.8°N
37.75°N
37.7°N
123°W
122.9°W
122.8°W
122.7°W
122.6°W
122.5°W
122.4°W
122.3°W
yvar
20
10

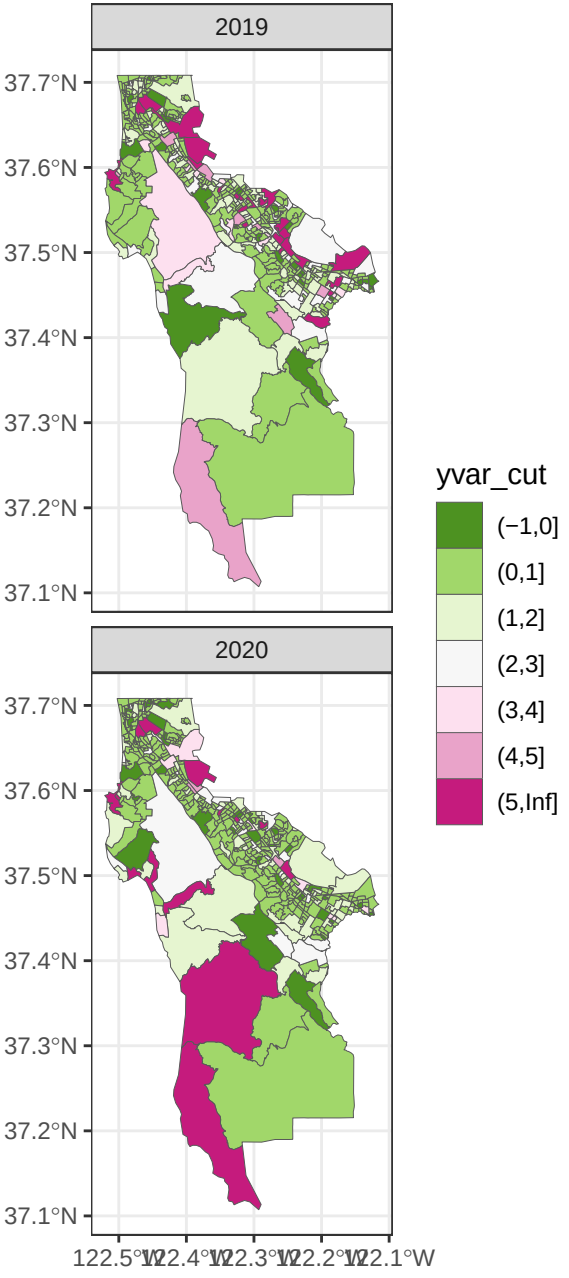

San Francisco Distribution of CBGs MI >= 3
2019
MW_U: pval = 0.617
KS: pval = 0.999
2020
MW_U: pval = 0.617
KS: pval = 0.999
density
pop_density
0
500
1000
1500
0.000
0.001
0.002
0.003
0.004


San Francisco Distribution of CBGs MI >= 3
2019
Dense CBGs 2019: 4 2020: 1
Binom Prob Success:0.017 p value:0.005 null:0.118
2020
Dense CBGs 2019: 4 2020: 1
Binom Prob Success:0.017 p value:0.005 null:0.118
count
10.0
7.5
5.0
2.5
0.0
0.000
0.001
0.002
0.003
0.004
pop_density

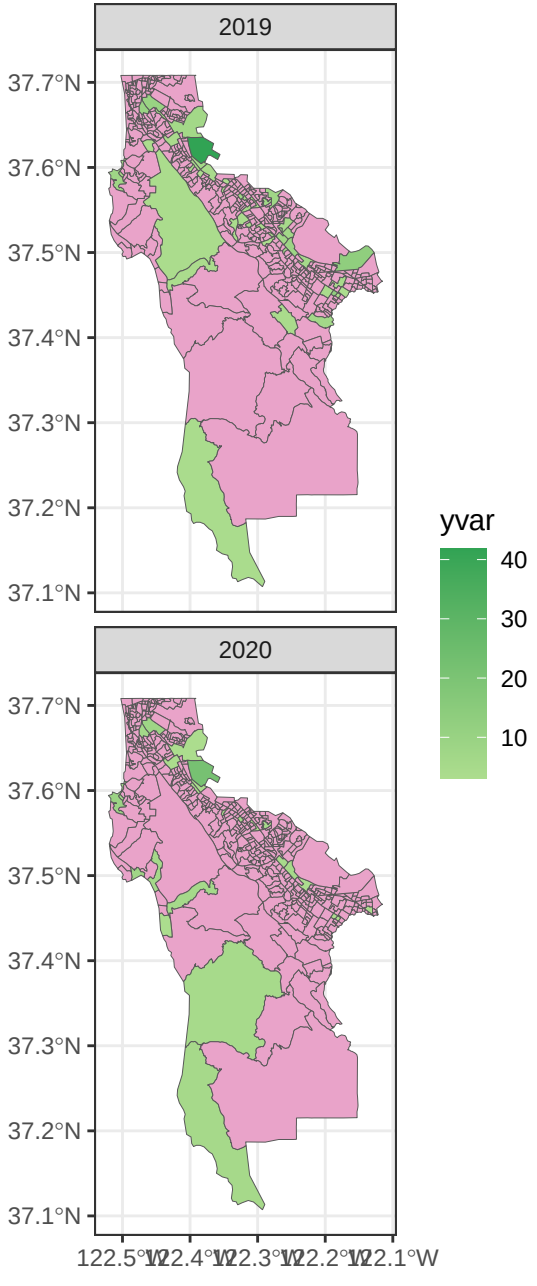

San Francisco Distribution of Pop Density MI >= 3 (all incl outliers)
06075
MW_U: pval = 0.617
KS: pval = 0.999
0.004
0.003
0.002
0.001
0.000
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

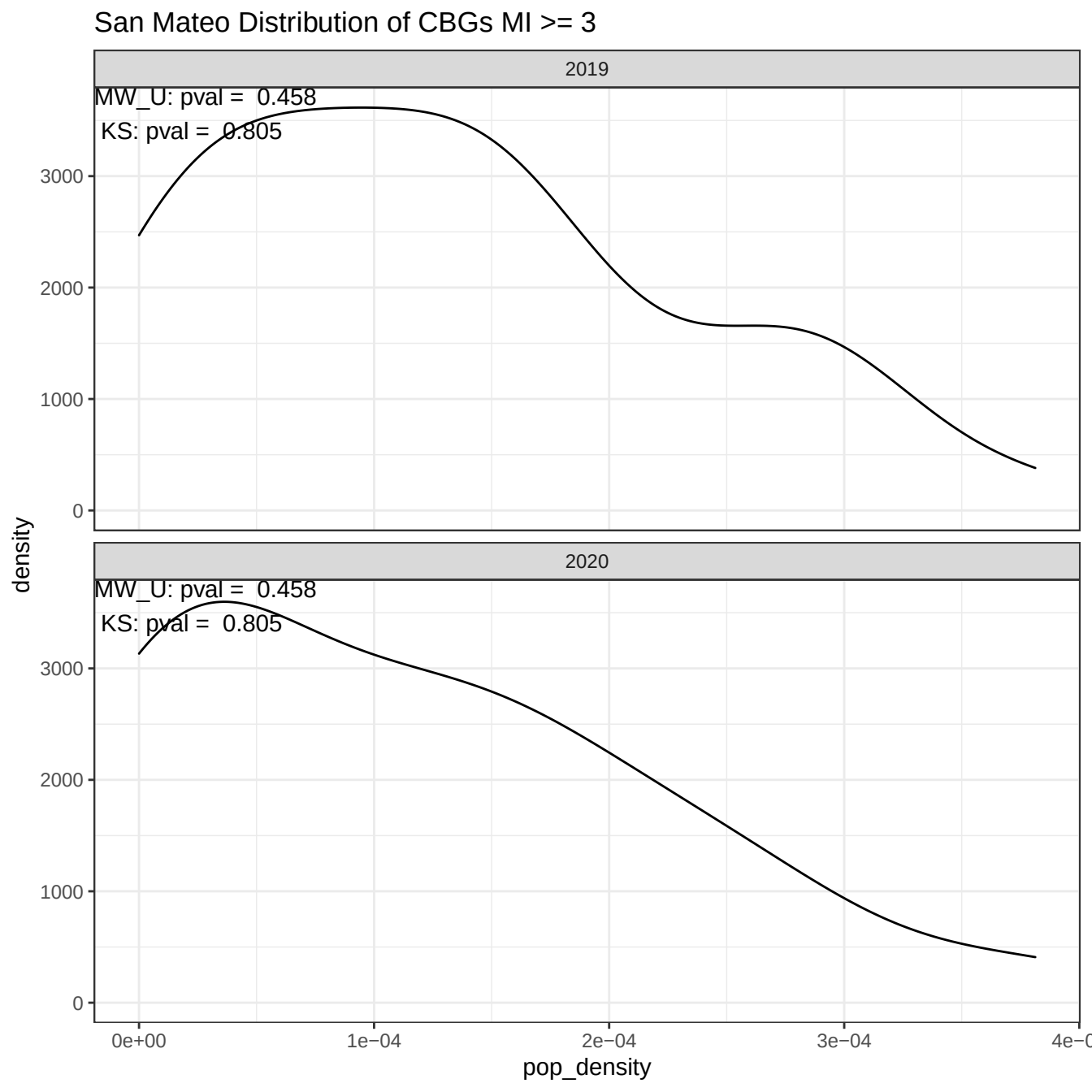

San Francisco Distribution of Pop Density MI >= 3 (no outliers)
06075
MW_U: pval = 0.617
KS: pval = 0.999
pop_density
0.00075
0.00050
0.00025
0.00000
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

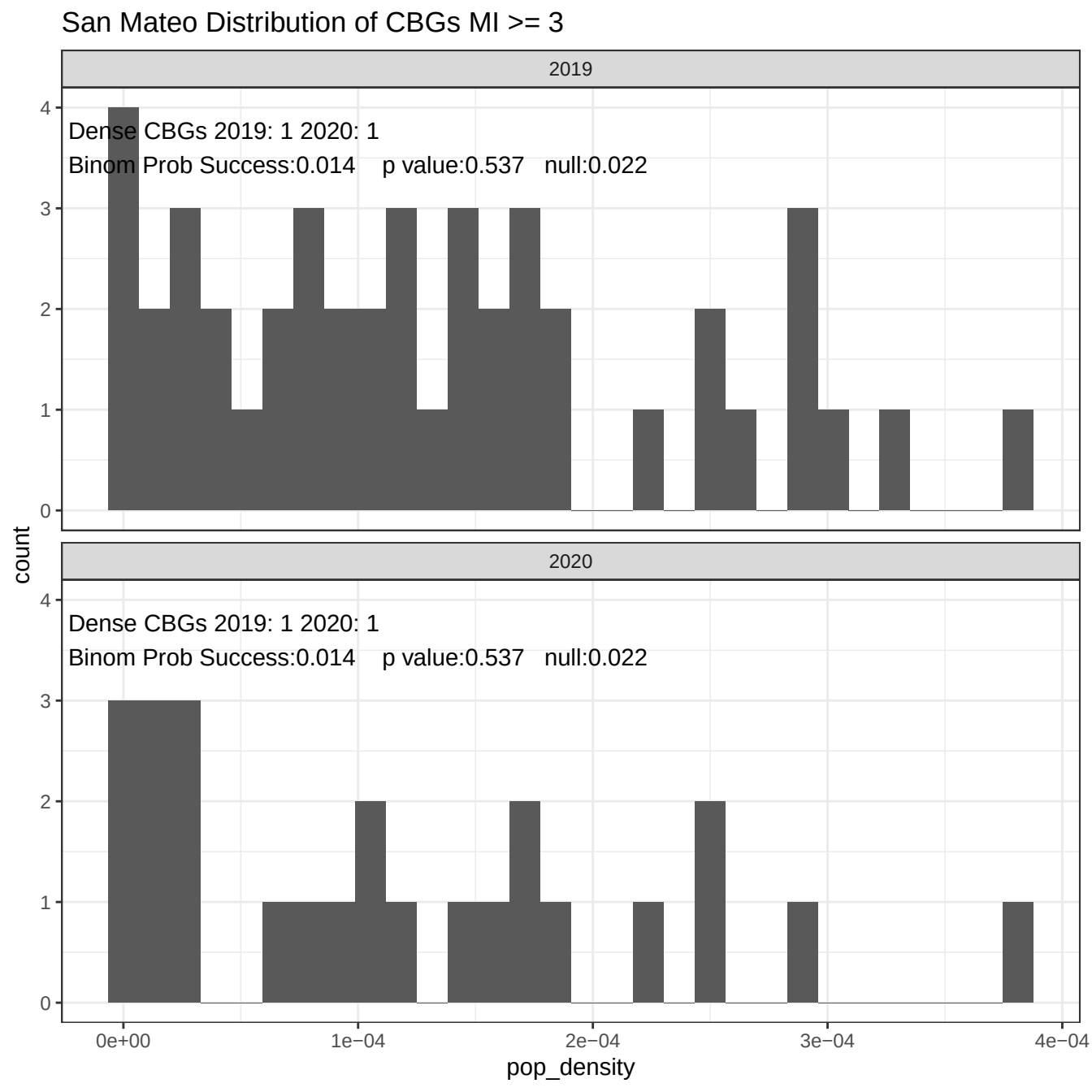
San Mateo Summer Mobility Over 34 Degrees

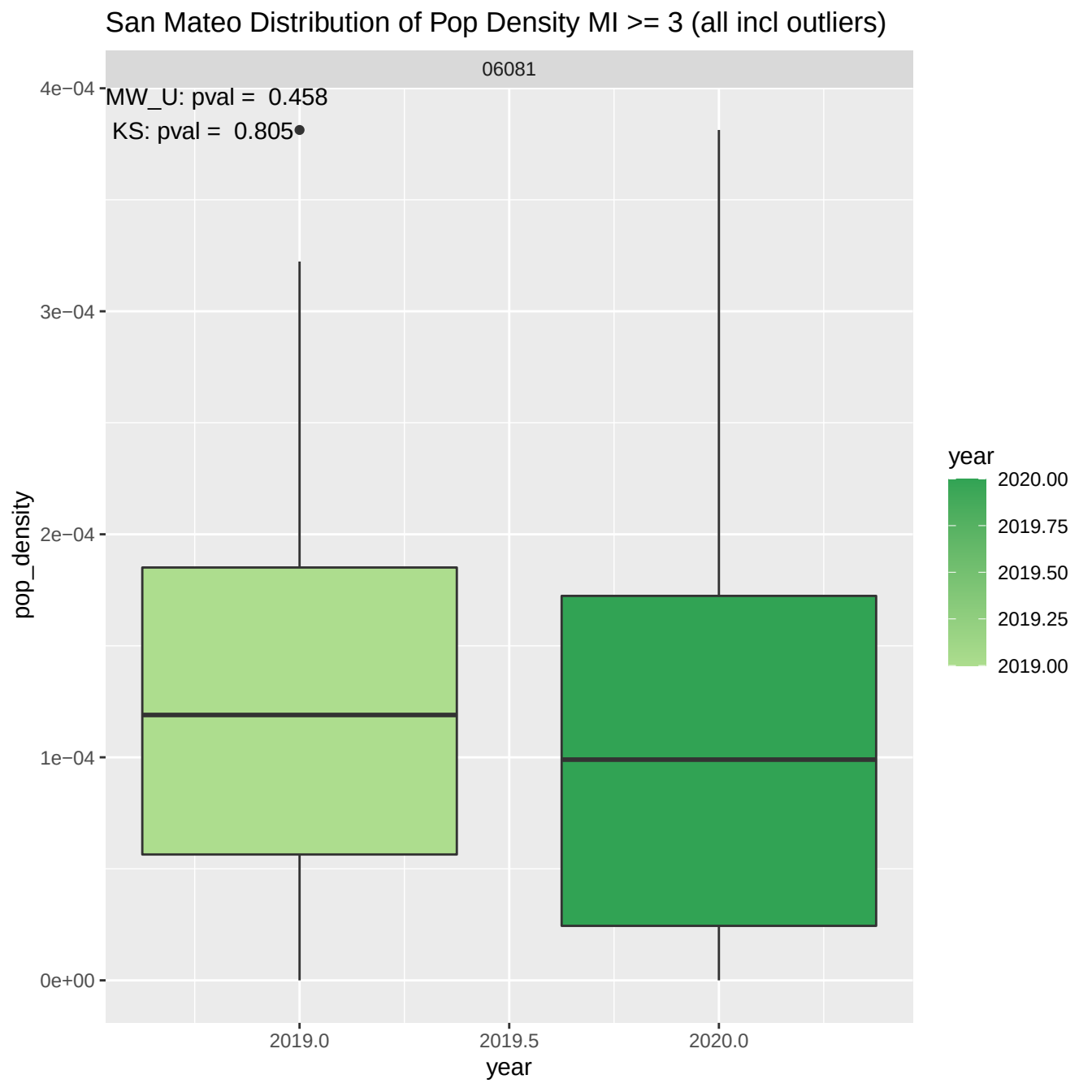


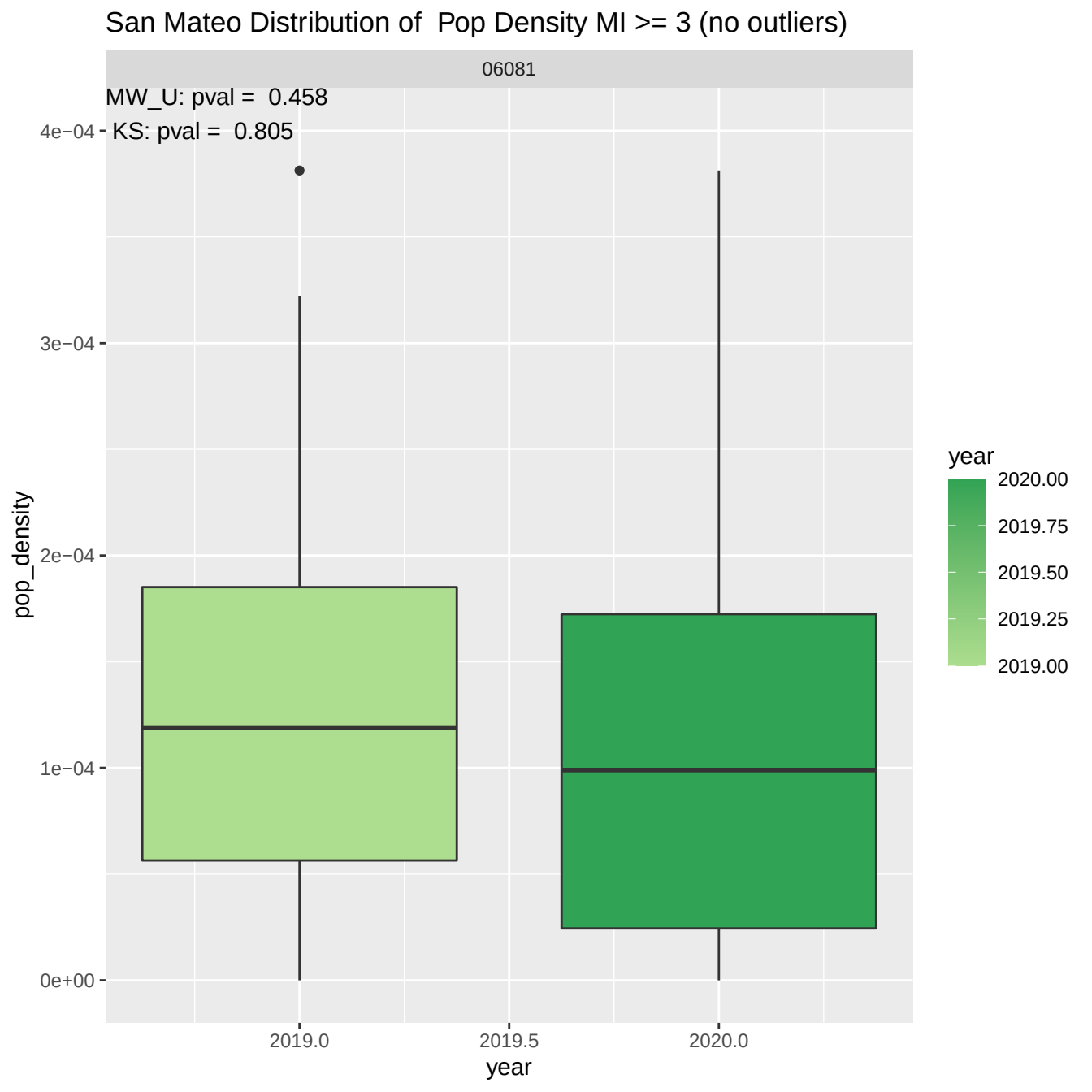
San Mateo Summer Mobility Over 34 Degrees & MI >=

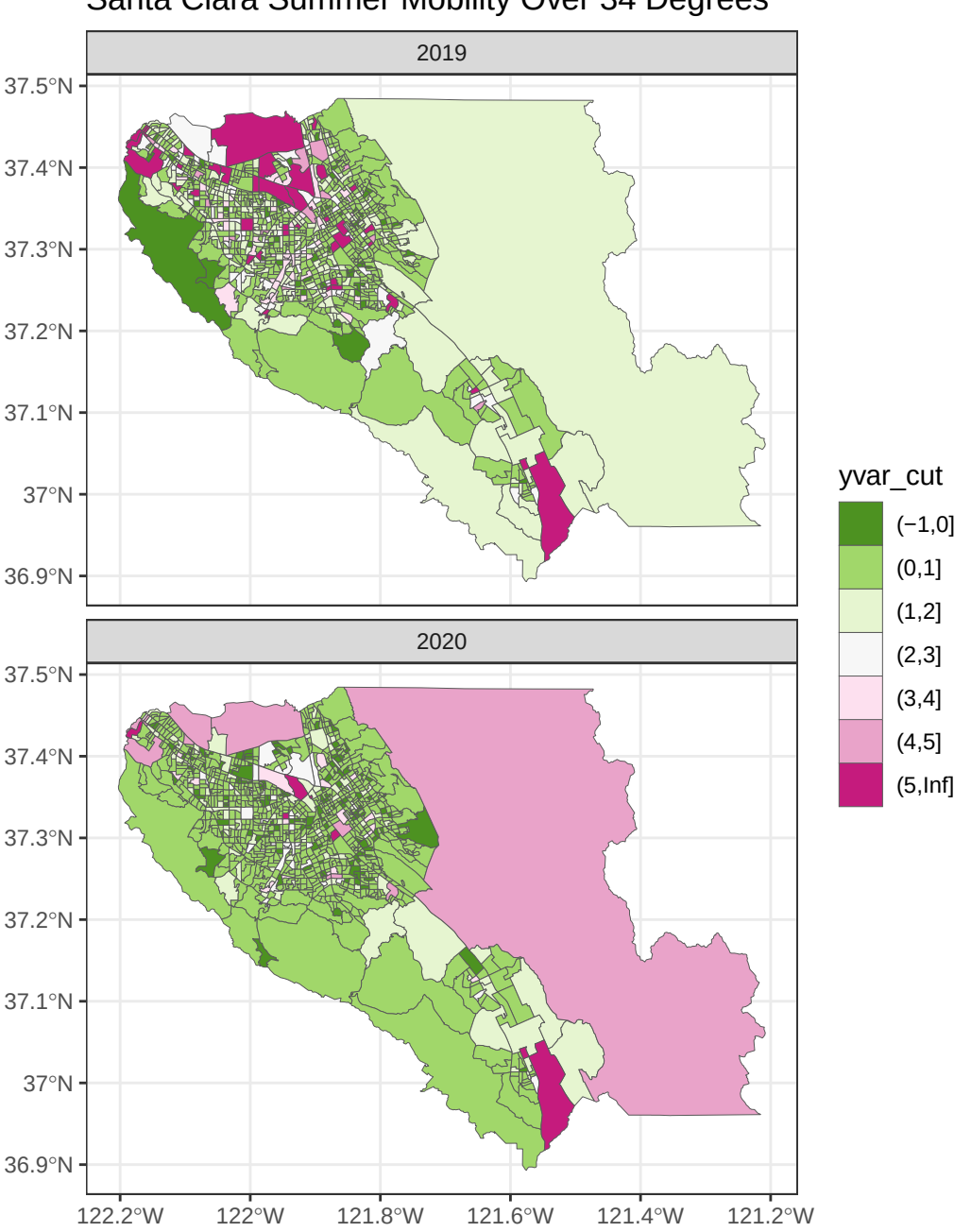


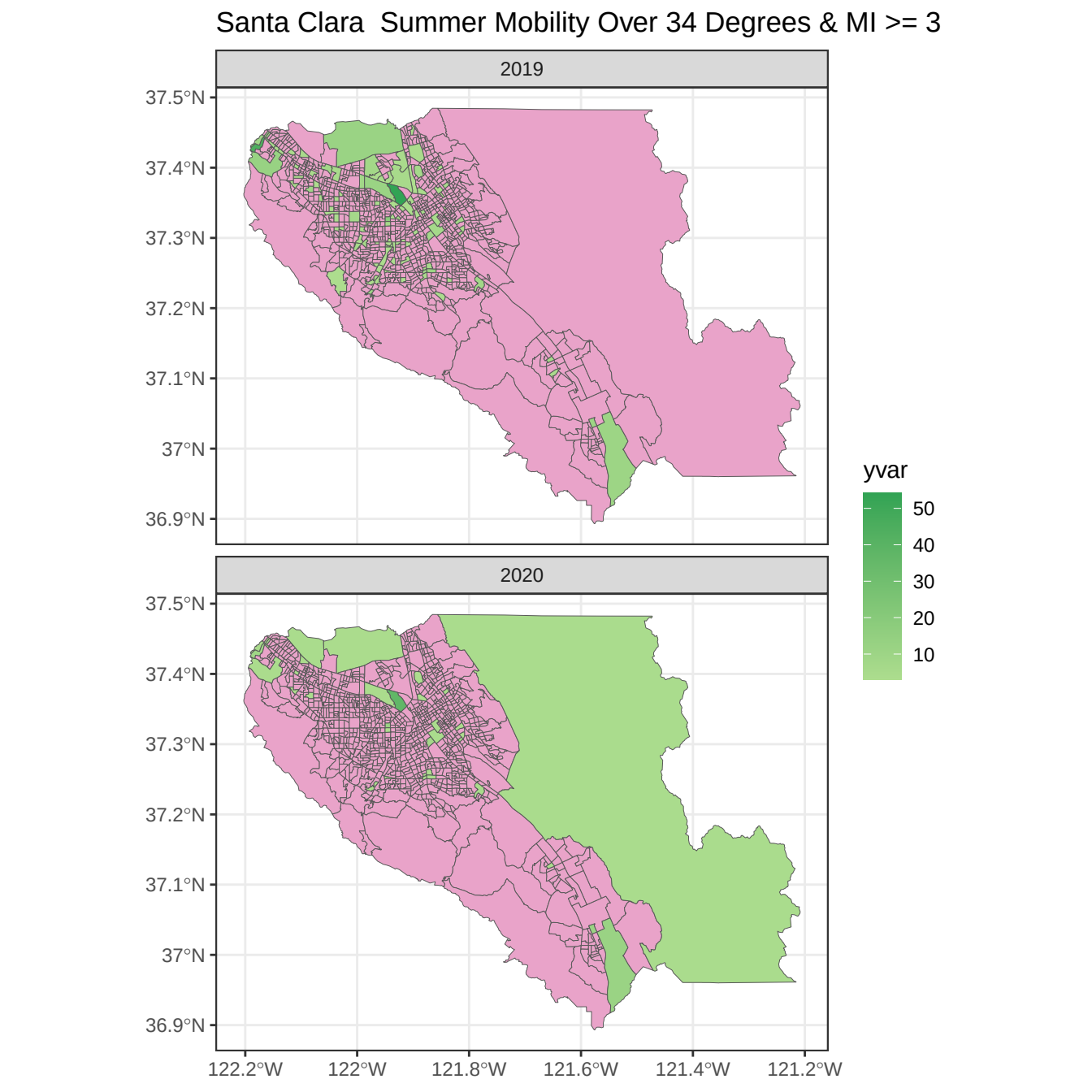

San Mateo Distribution of CBGs MI >= 3
2019
MW_U: pval = 0.458
KS: pval = 0.805
2020
MW_U: pval = 0.458
KS: pval = 0.805
density
pop_density
0
1000
2000
3000
0e+00
1e−04
2e−04
3e−04
4e−0

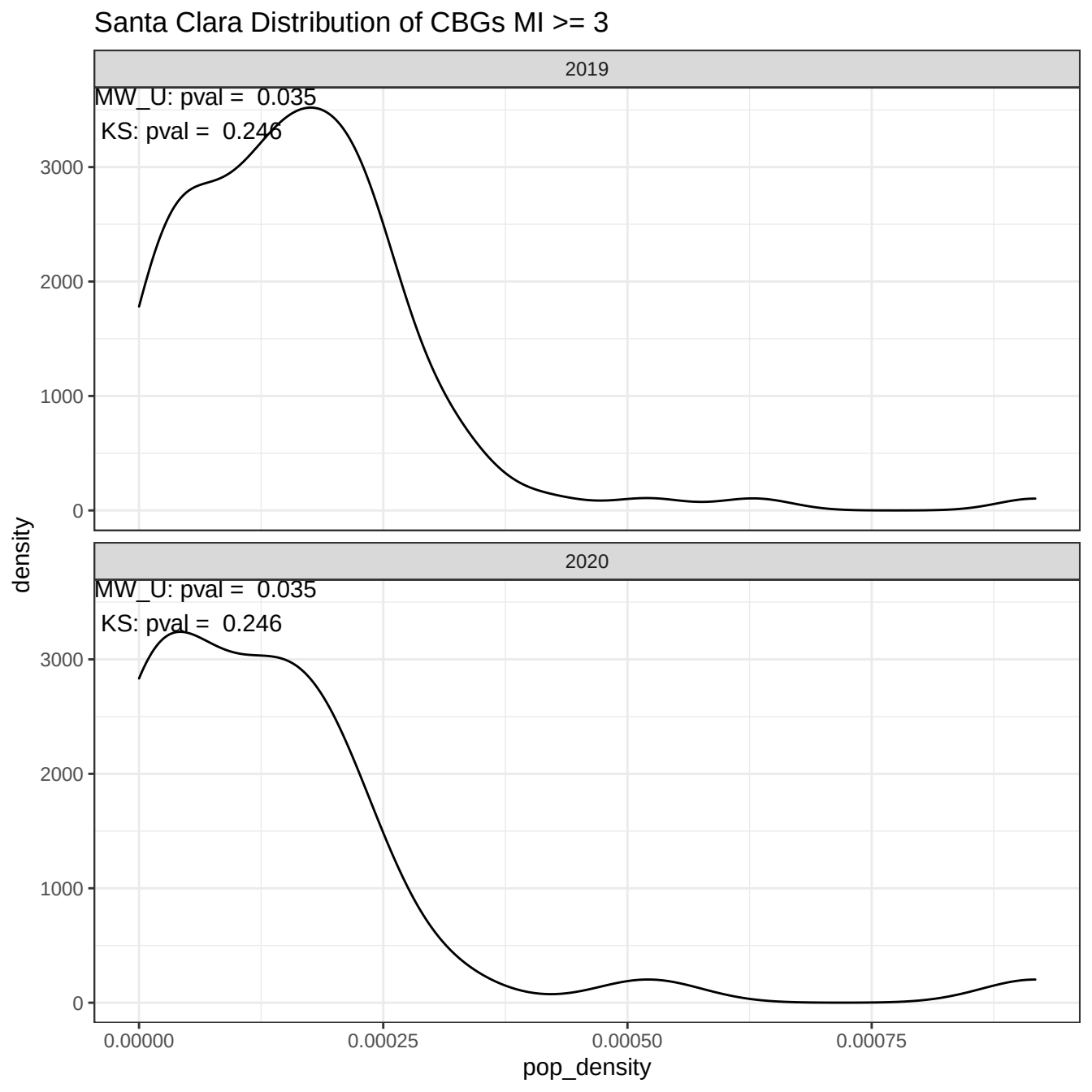

San Mateo Distribution of CBGs MI >= 3
2019
Dense CBGs 2019: 1 2020: 1
Binom Prob Success:0.014 p value:0.537 null:0.022
2020
Dense CBGs 2019: 1 2020: 1
Binom Prob Success:0.014 p value:0.537 null:0.022
count
pop_density
0e+00
1e−04
2e−04
3e−04
4e−04

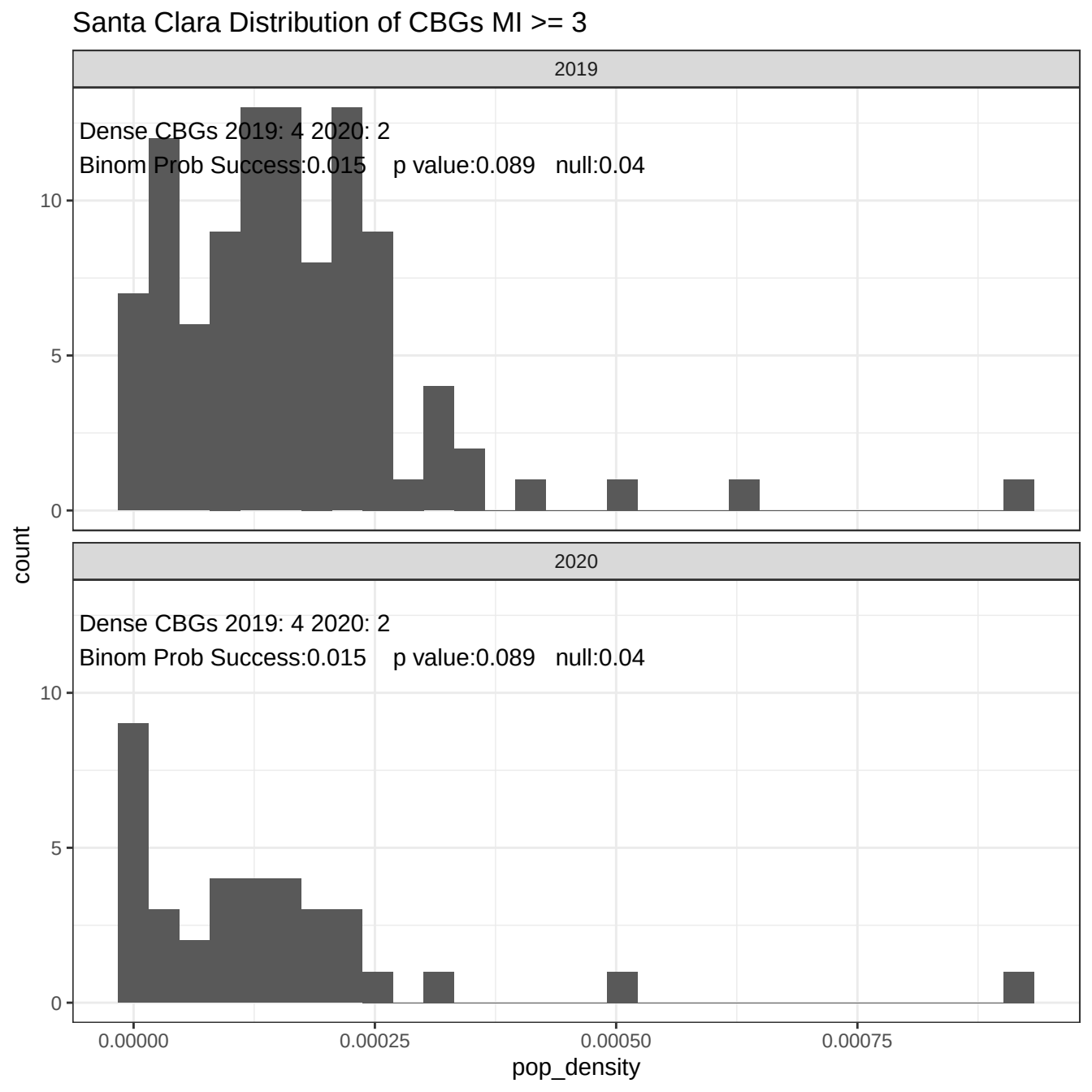

San Mateo Distribution of Pop Density MI >= 3 (all incl outliers)
06081
MW_U: pval = 0.458
KS: pval = 0.805
4e−04
3e−04
2e−04
1e−04
0e+00
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

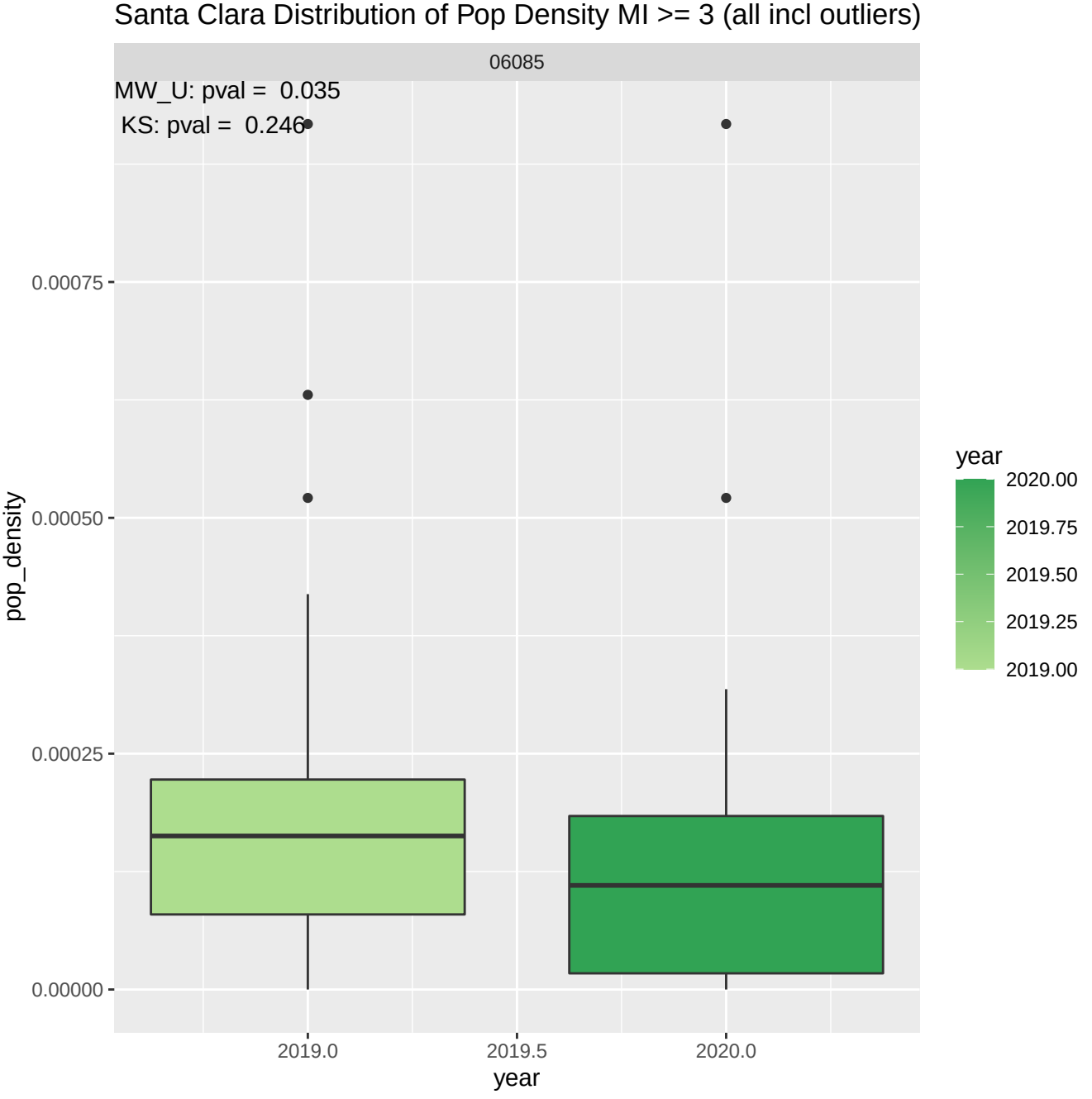

San Mateo Distribution of Pop Density MI >= 3 (no outliers)
06081
MW_U: pval = 0.458
KS: pval = 0.805
4e−04
3e−04
2e−04
1e−04
0e+00
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

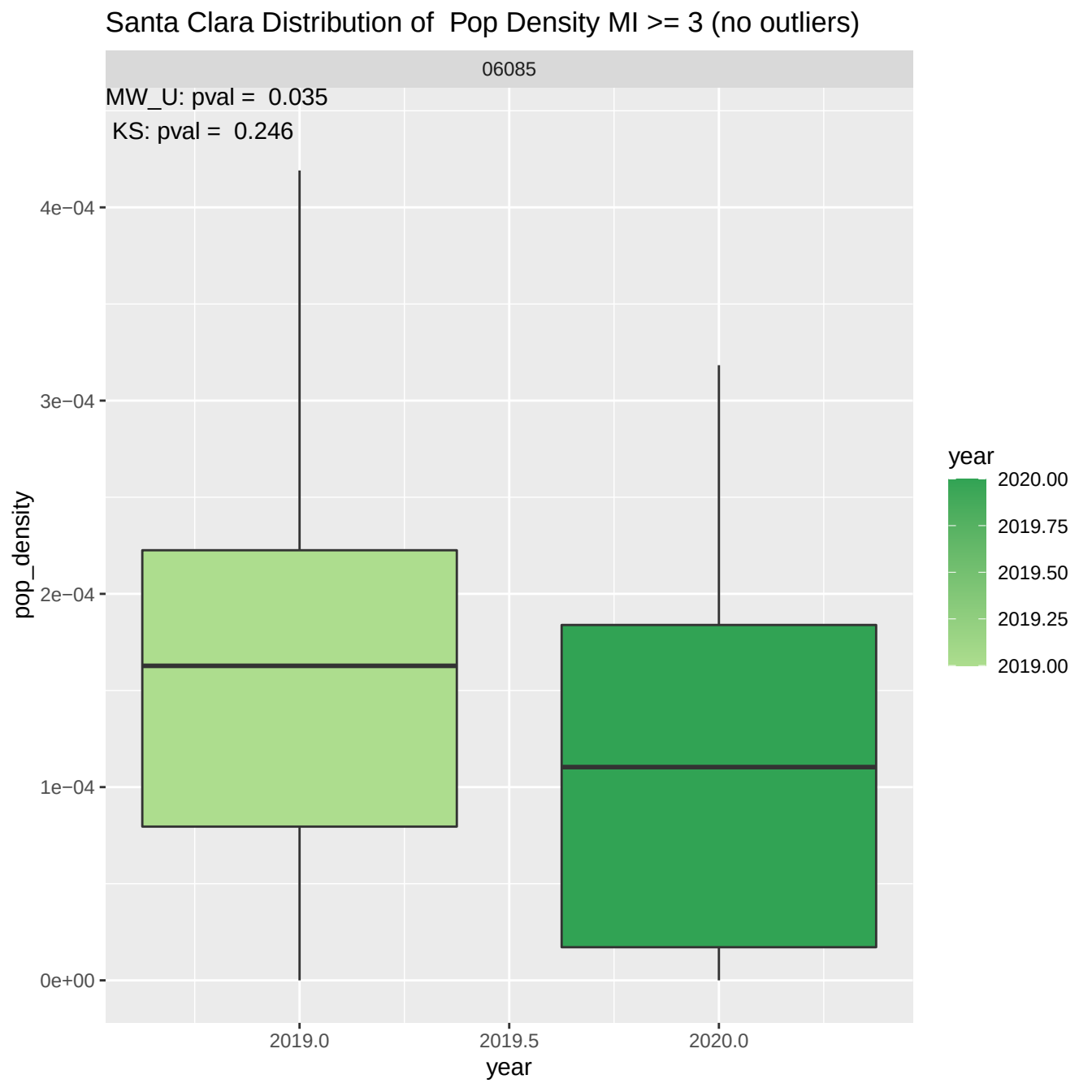

Santa Clara Summer Mobility Over 34 Degrees
2019
2020
37.5°N
37.4°N
37.3°N
37.2°N
37.1°N
37°N
36.9°N
122.2°W
122°W
121.8°W
121.6°W
121.4°W
121.2°W
yvar_cut
(−1,0]
(0,1]
(1,2]
(2,3]
(3,4]
(4,5]
(5,Inf]

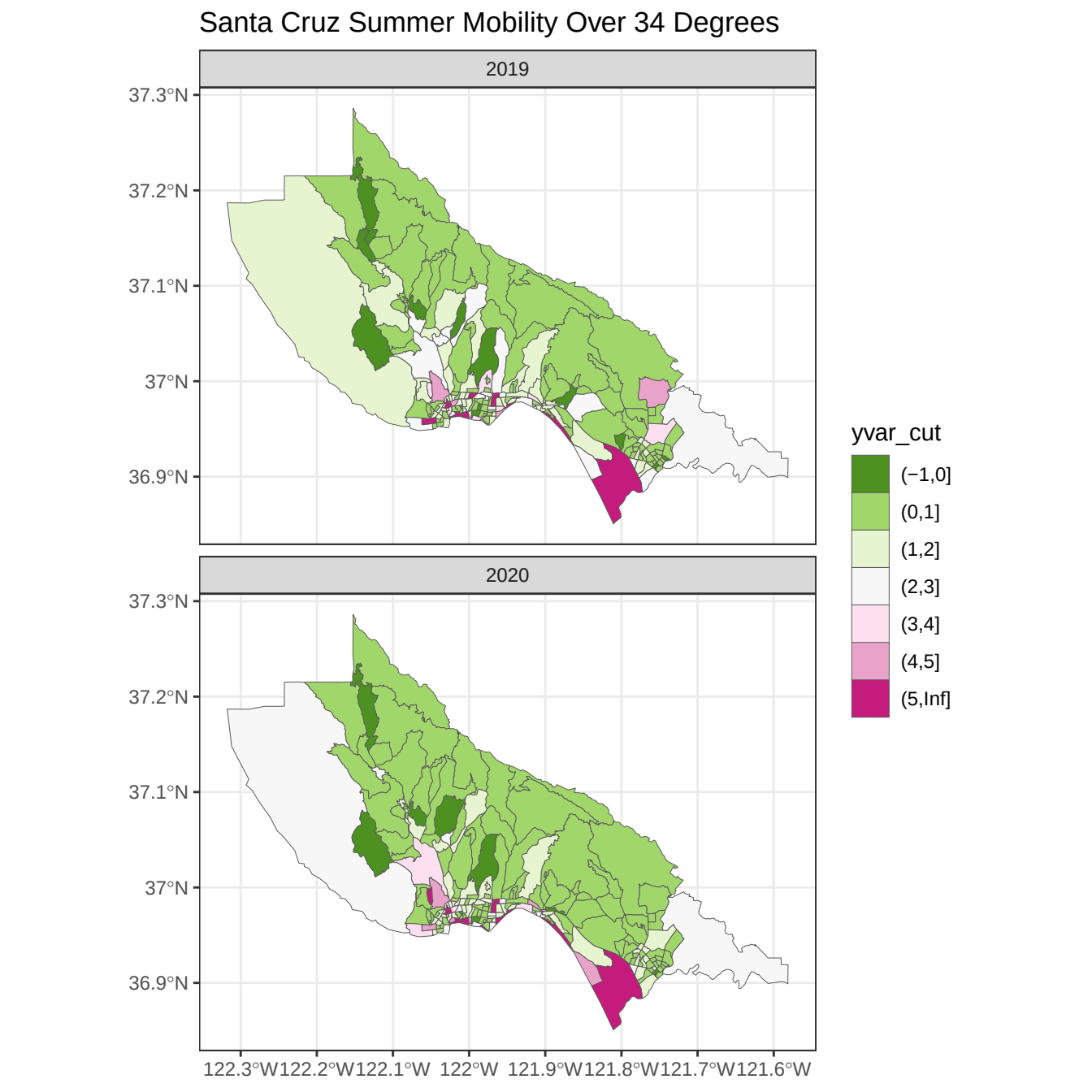

Santa Clara Summer Mobility Over 34 Degrees & MI >= 3
2019
2020
37.5°N
37.4°N
37.3°N
37.2°N
37.1°N
37°N
36.9°N
122.2°W
122°W
121.8°W
121.6°W
121.4°W
121.2°W
yvar
50
40
30
20
10

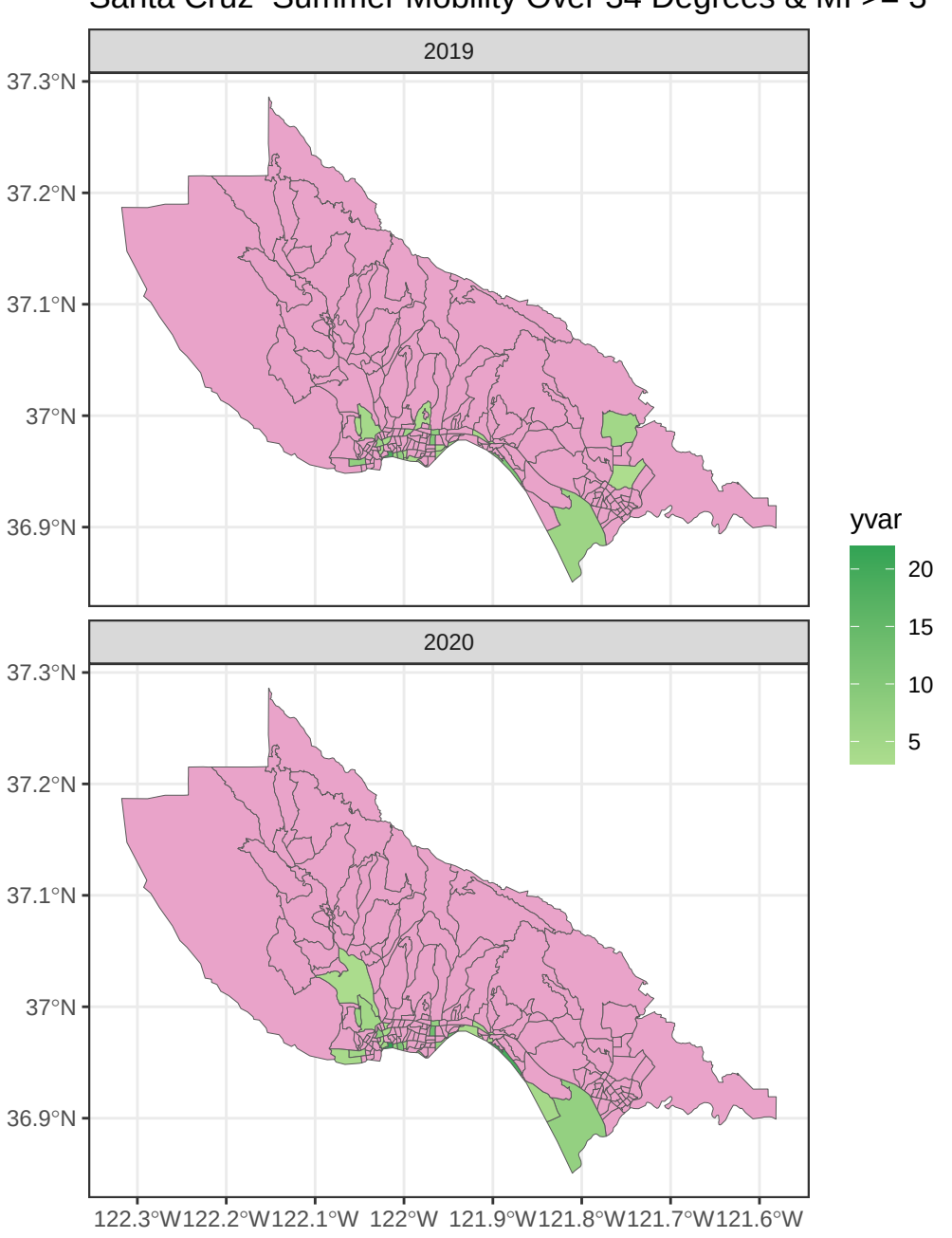

Santa Clara Distribution of CBGs MI >= 3
2019
MW_U: pval = 0.035
KS: pval = 0.246
2020
MW_U: pval = 0.035
KS: pval = 0.246
density
pop_density
0
1000
2000
3000
0.00000
0.00025
0.00050
0.00075

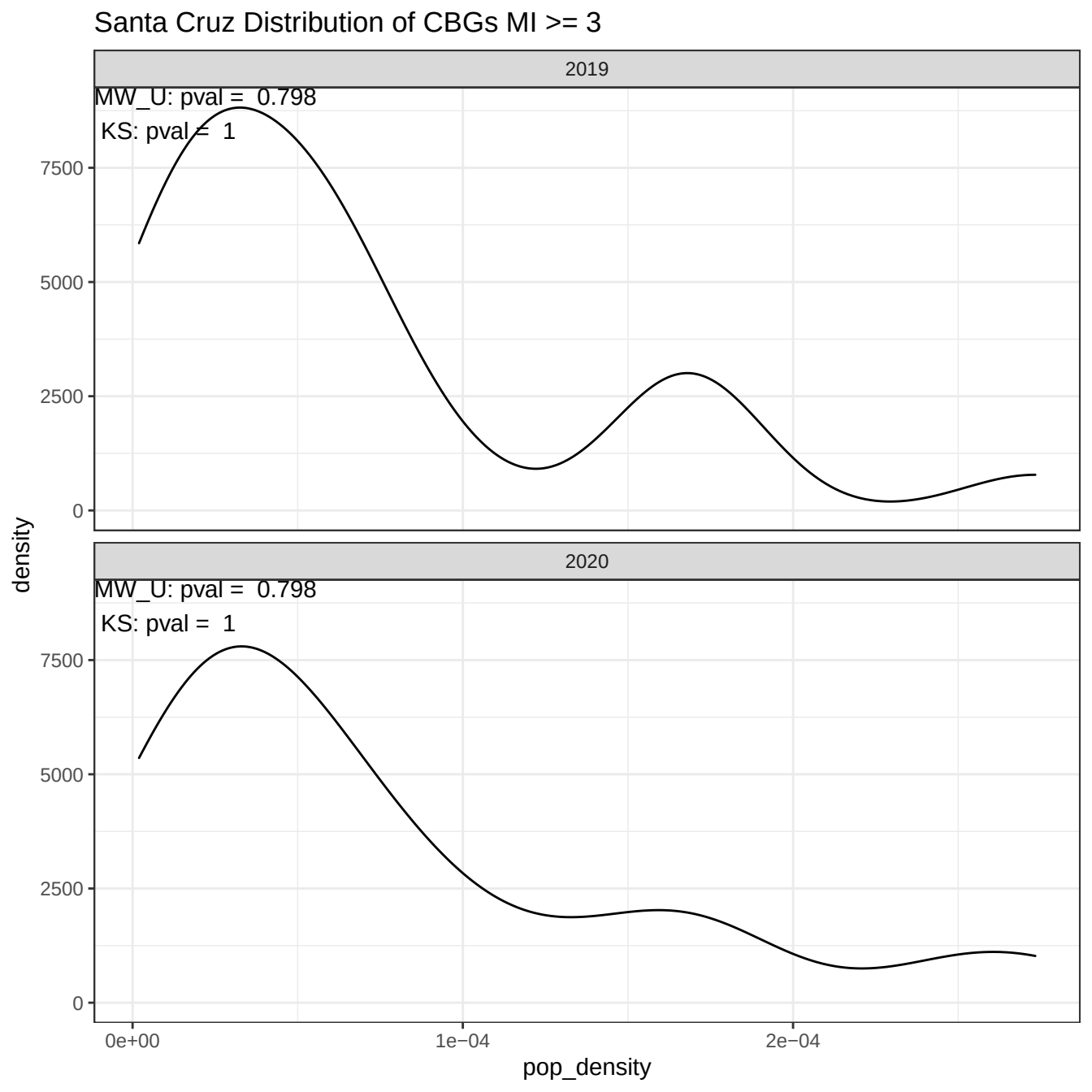

Santa Clara Distribution of CBGs MI >= 3
2019
Dense CBGs 2019: 4 2020: 2
Binom Prob Success:0.015 p value:0.089 null:0.04
2020
Dense CBGs 2019: 4 2020: 2
Binom Prob Success:0.015 p value:0.089 null:0.04
count
pop_density
0.00000
0.00025
0.00050
0.00075
0
5
10

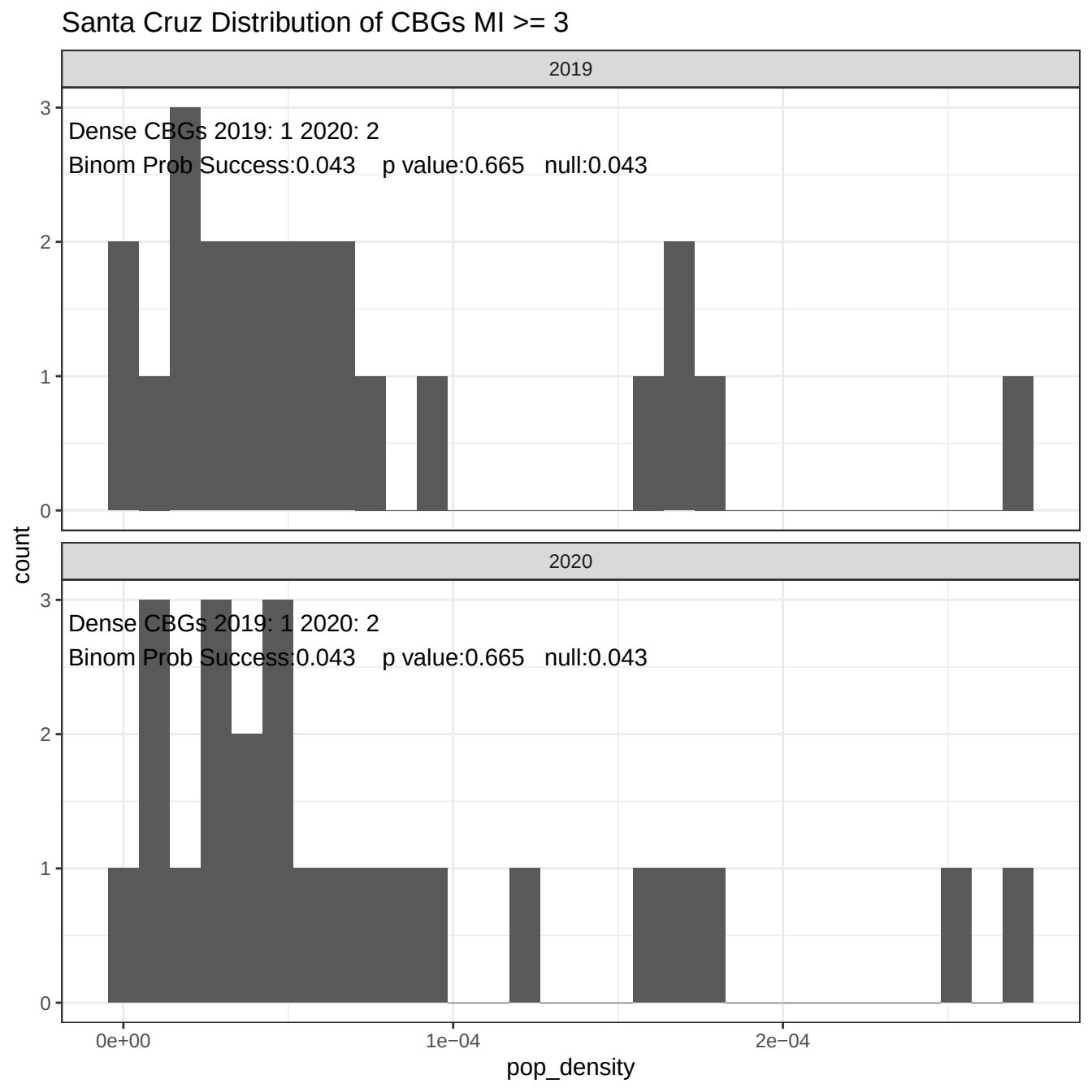

Santa Clara Distribution of Pop Density MI >= 3 (all incl outliers)
06085
MW_U: pval = 0.035
KS: pval = 0.246
0.00075
0.00050
0.00025
0.00000
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

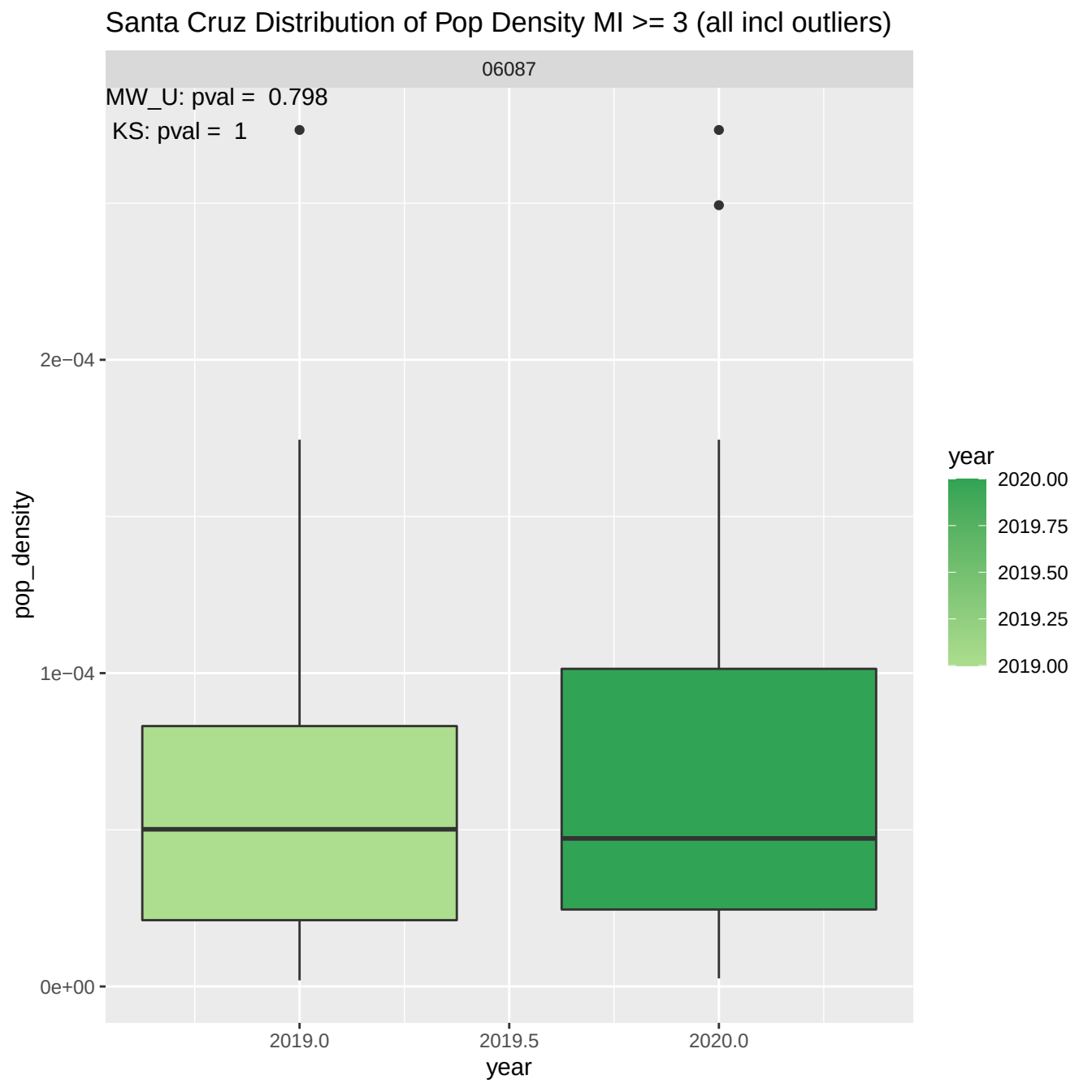

Santa Clara Distribution of Pop Density MI >= 3 (no outliers)
06085
MW_U: pval = 0.035
KS: pval = 0.246
4e−04
3e−04
2e−04
1e−04
0e+00
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

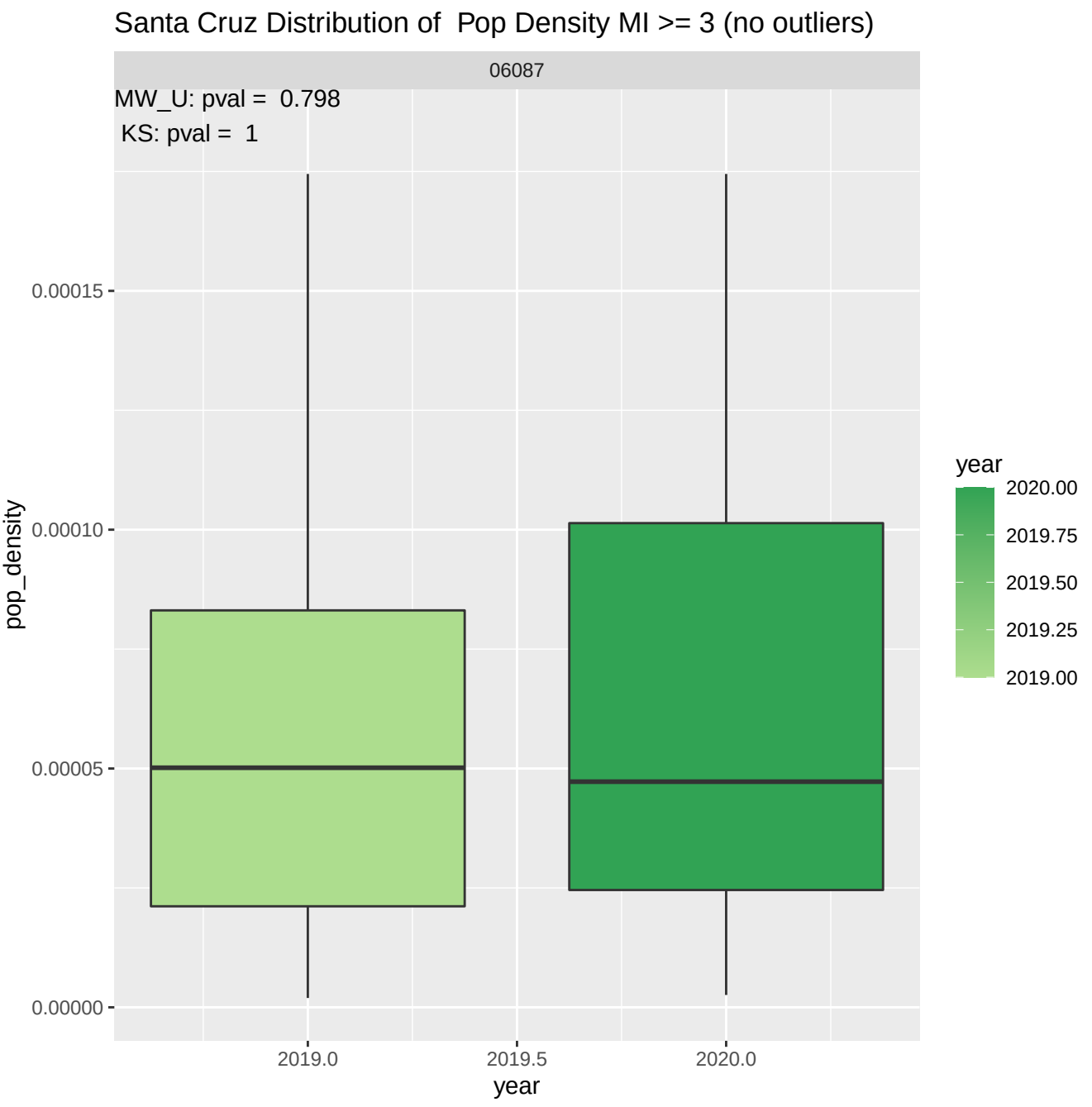

Santa Cruz Summer Mobility Over 34 Degrees
2019
2020
37.3°N
37.2°N
37.1°N
37°N
36.9°N
122.3°W
122.2°W
122.1°W
122°W
121.9°W
121.8°W
121.7°W
121.6°W
yvar_cut
(−1,0]
(0,1]
(1,2]
(2,3]
(3,4]
(4,5]
(5,Inf]

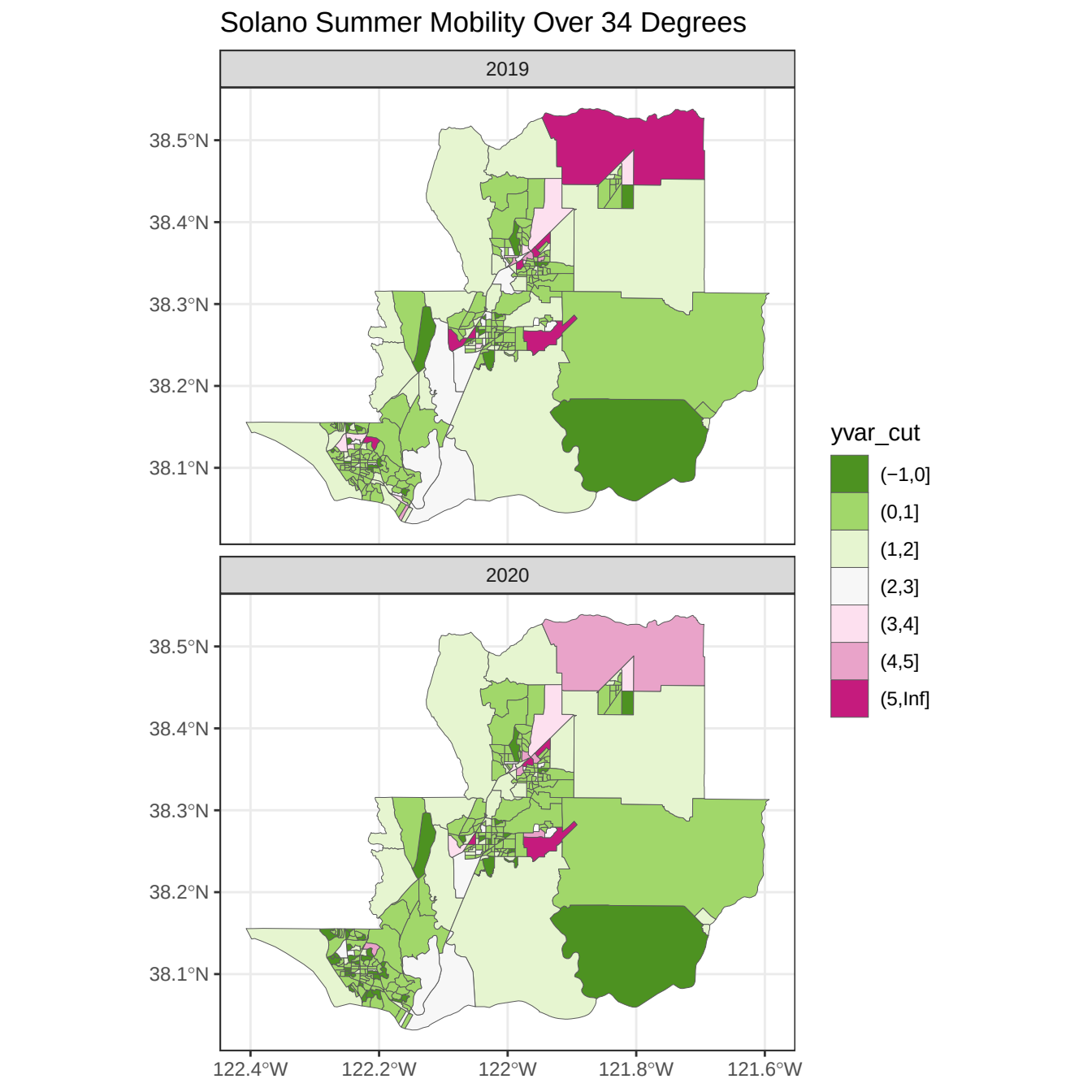

Santa Cruz Summer Mobility Over 34 Degrees & MI >= 3
2019
2020
37.3°N
37.2°N
37.1°N
37°N
36.9°N
122.3°W
122.2°W
122.1°W
122°W
121.9°W
121.8°W
121.7°W
121.6°W
yvar
20
15
10
5

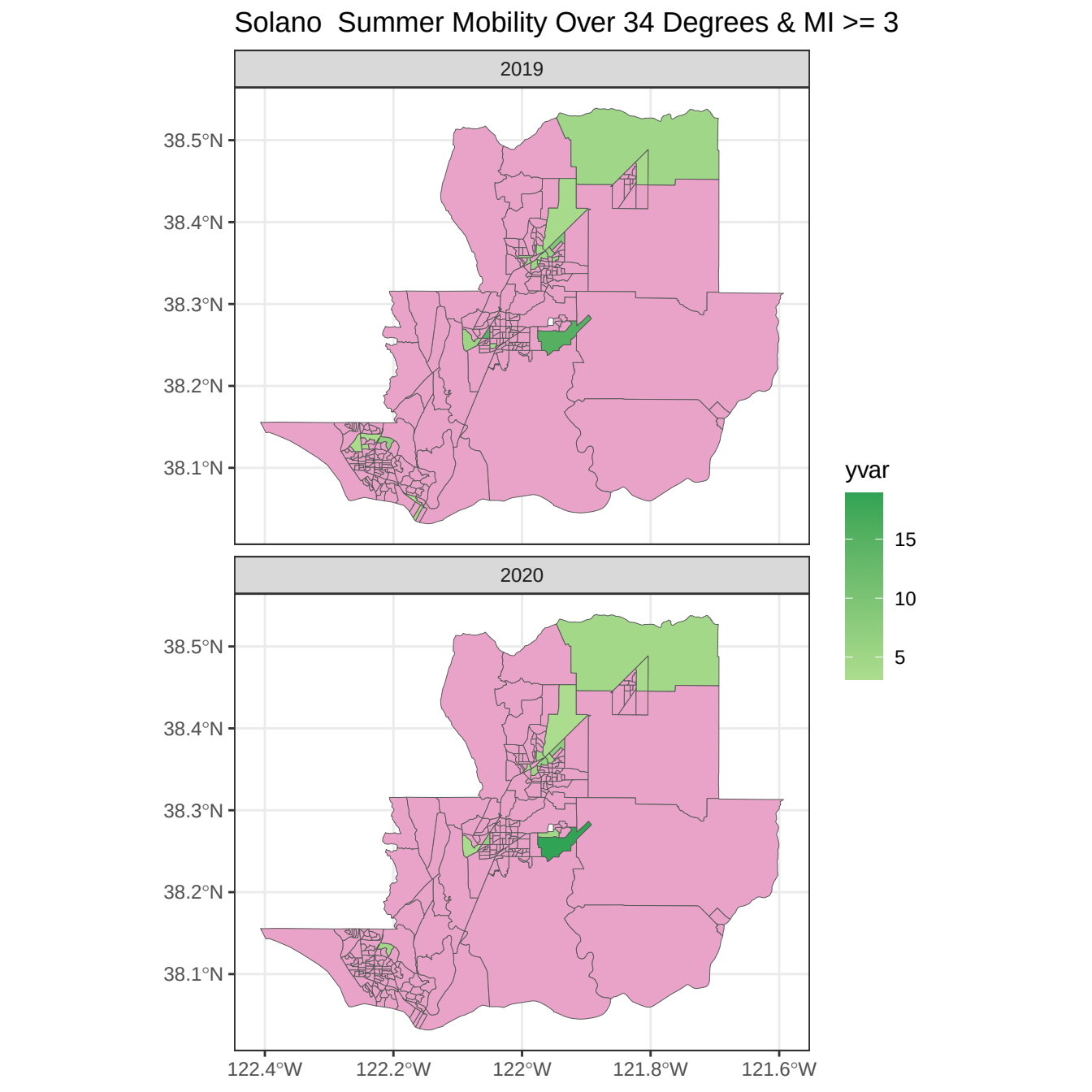

Santa Cruz Distribution of CBGs MI >= 3
2019
MW_U: pval = 0.798
KS: pval = 1
2020
MW_U: pval = 0.798
KS: pval = 1
density
7500
5000
2500
0
0e+00
1e−04
2e−04
pop_density

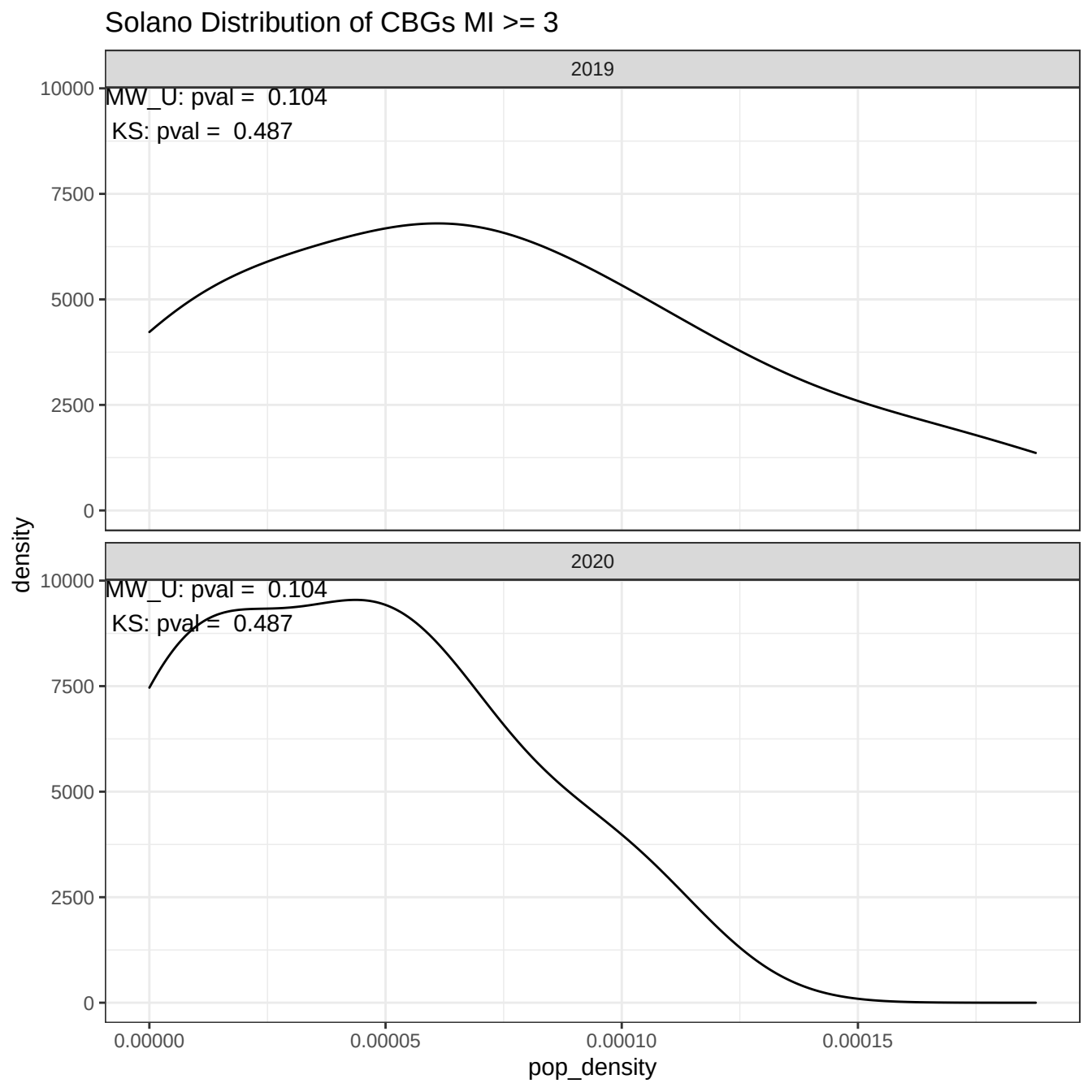

Santa Cruz Distribution of CBGs MI >= 3
2019
Dense CBGs 2019: 1 2020: 2
Binom Prob Success:0.043 p value:0.665 null:0.043
2020
Dense CBGs 2019: 1 2020: 2
Binom Prob Success:0.043 p value:0.665 null:0.043
count
0
1
2
3
0e+00
1e−04
2e−04
pop_density

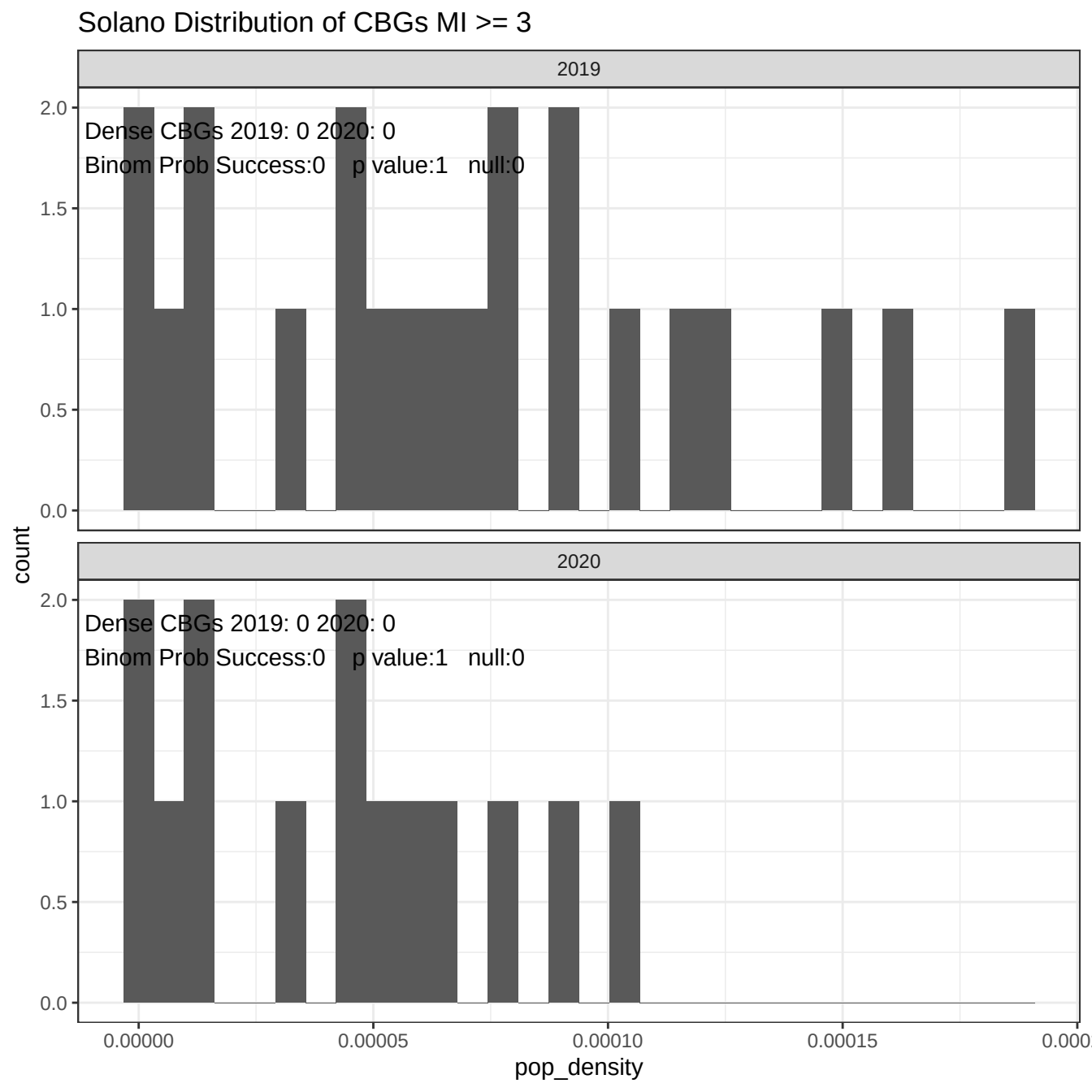

Santa Cruz Distribution of Pop Density MI >= 3 (all incl outliers)
06087
MW_U: pval = 0.798
KS: pval = 1
2e−04
1e−04
0e+00
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

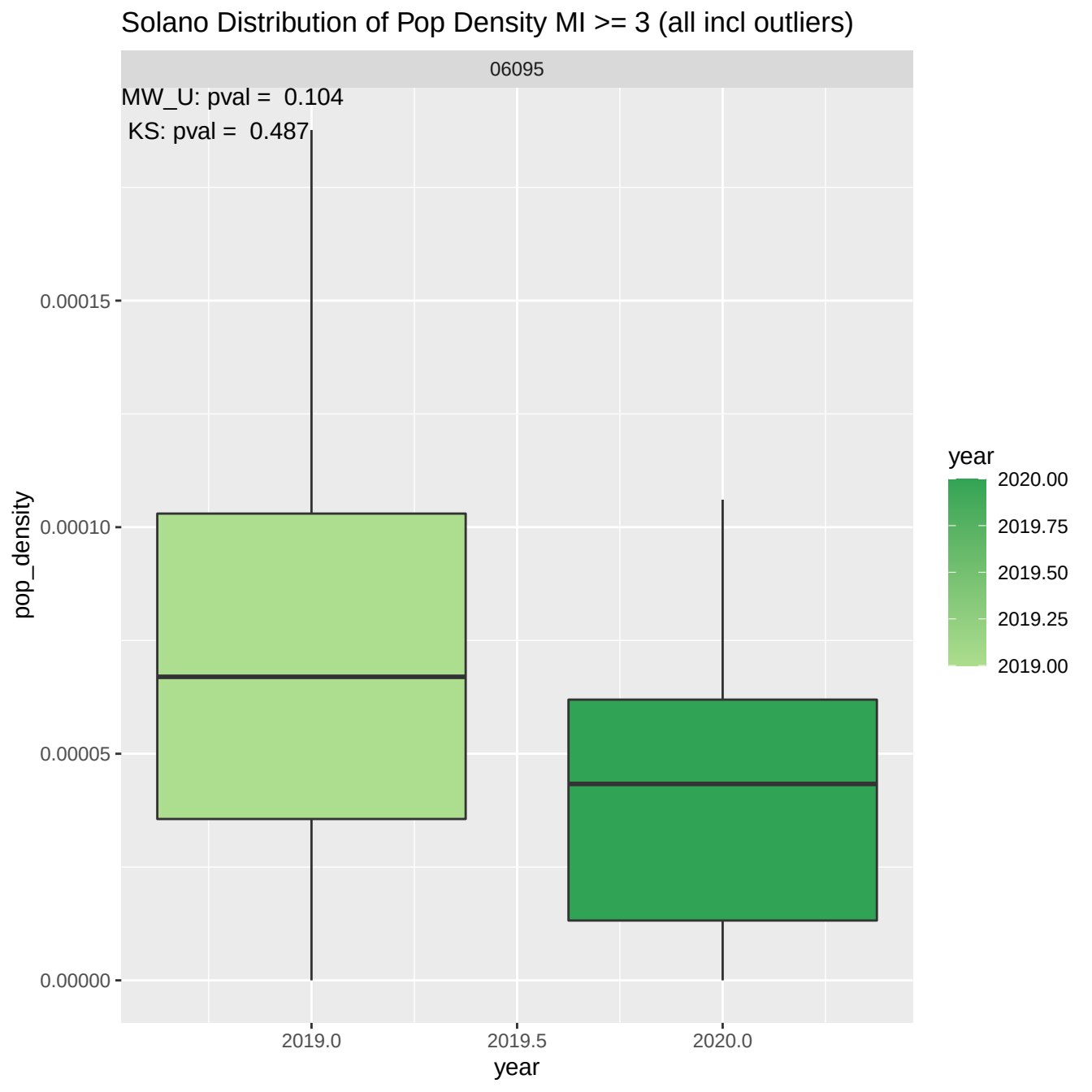

Santa Cruz Distribution of Pop Density MI >= 3 (no outliers)
06087
MW_U: pval = 0.798
KS: pval = 1
0.00015
0.00010
0.00005
0.00000
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

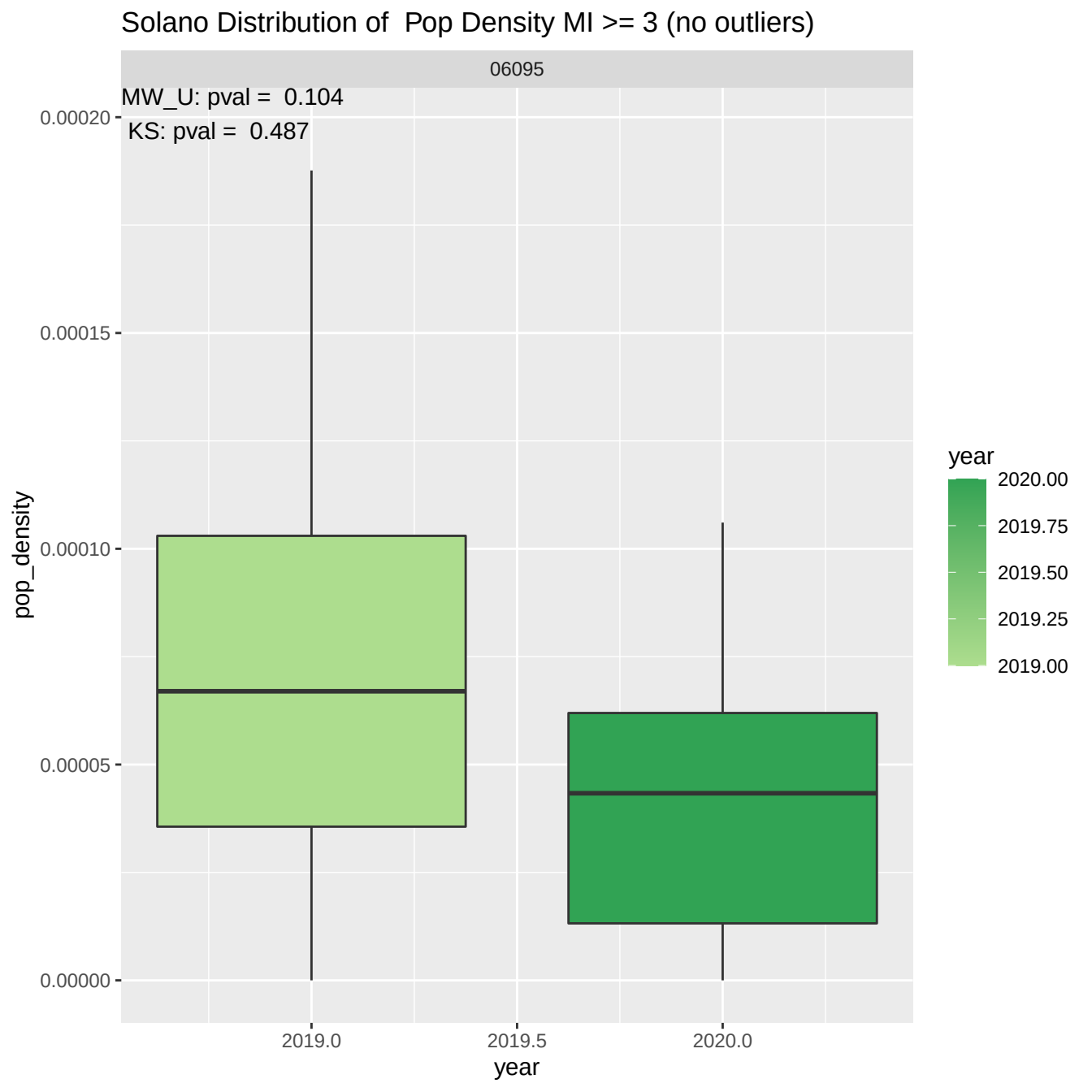

Solano Summer Mobility Over 34 Degrees
2019
2020
38.5°N
38.4°N
38.3°N
38.2°N
38.1°N
122.4°W
122.2°W
122°W
121.8°W
121.6°W
yvar_cut
(−1,0]
(0,1]
(1,2]
(2,3]
(3,4]
(4,5]
(5,Inf]

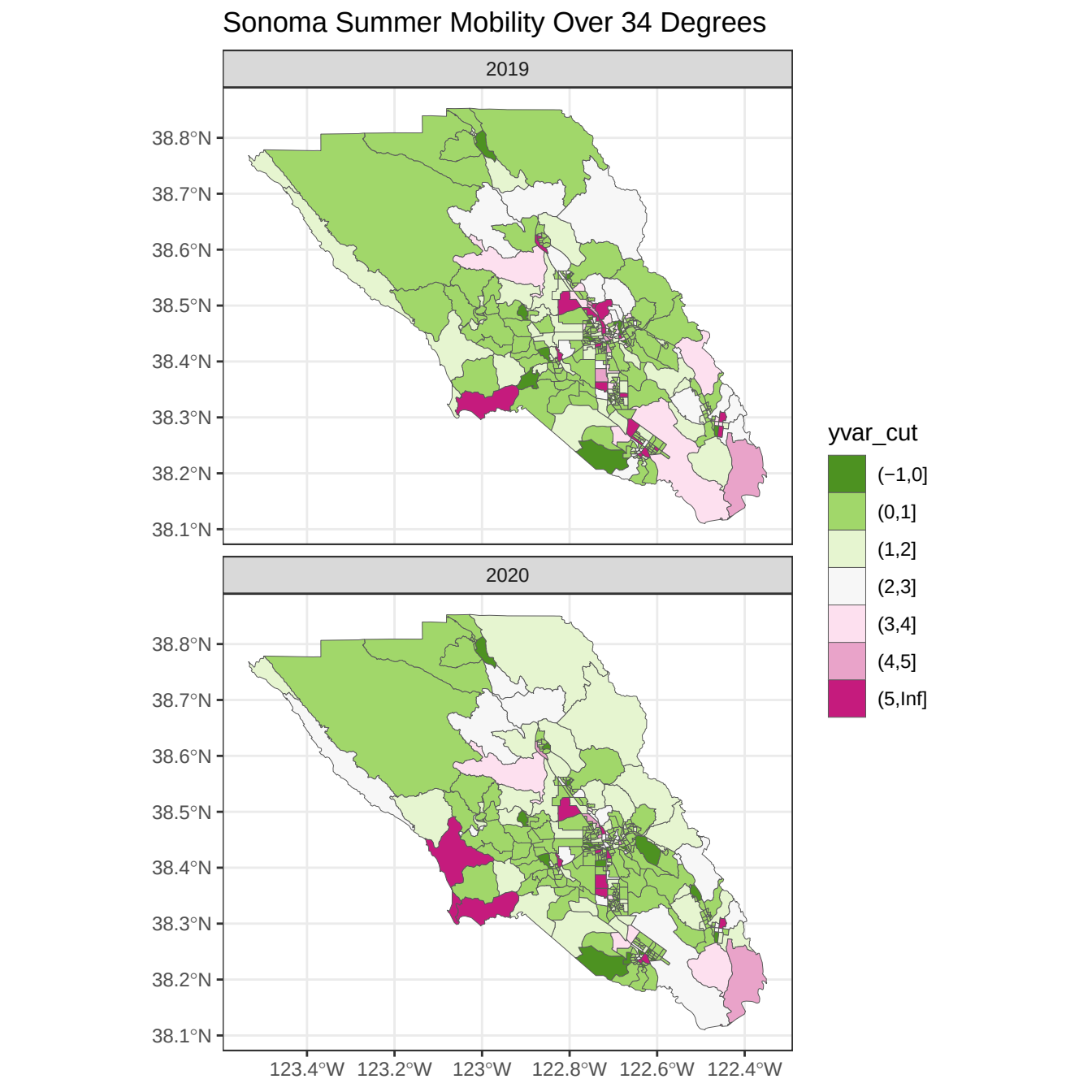

Solano Summer Mobility Over 34 Degrees & MI >= 3
2019
2020
38.5°N
38.4°N
38.3°N
38.2°N
38.1°N
122.4°W
122.2°W
122°W
121.8°W
121.6°W
yvar
15
10
5

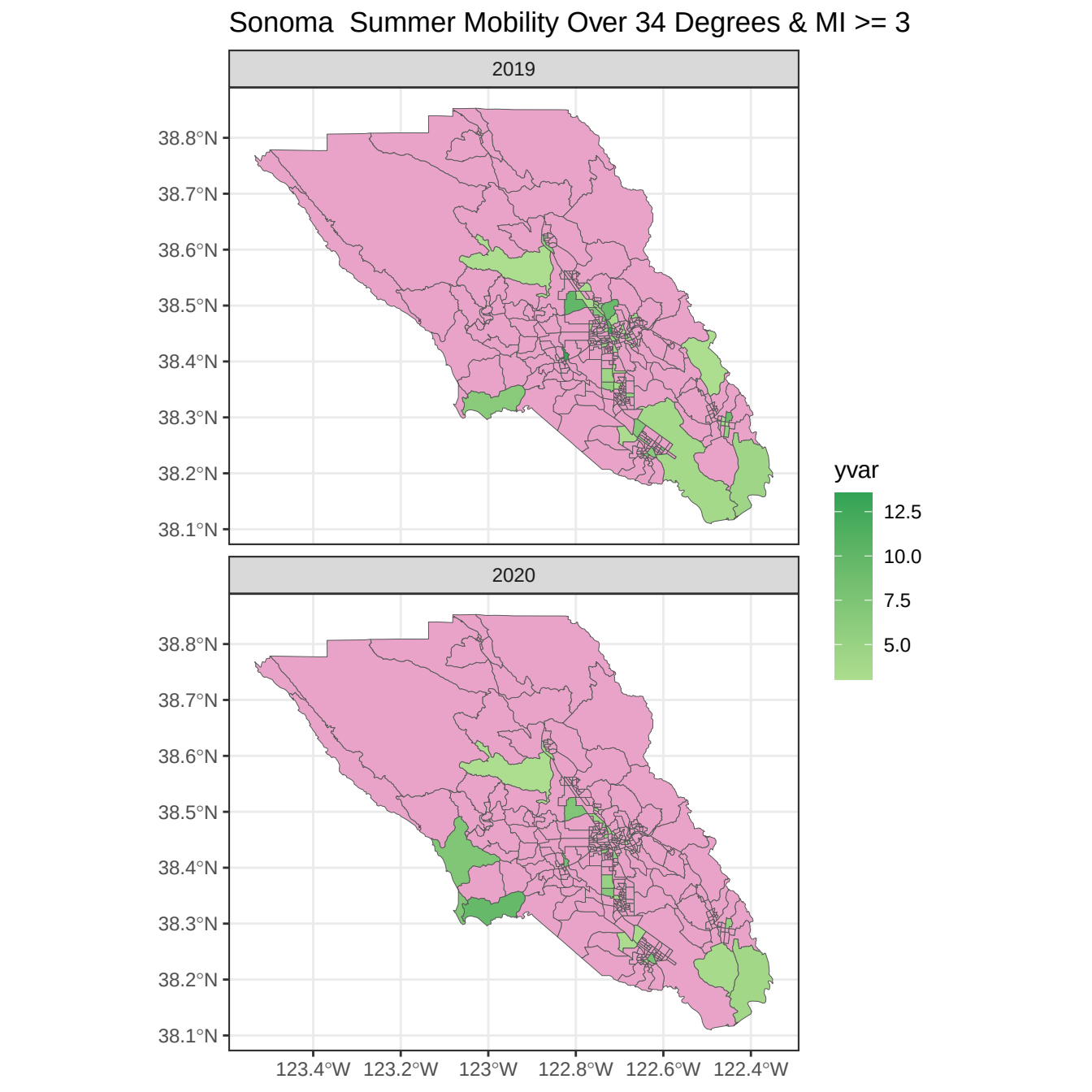

Solano Distribution of CBGs MI >= 3
2019
MW_U: pval = 0.104
KS: pval = 0.487
2020
MW_U: pval = 0.104
KS: pval = 0.487
density
pop_density
0
2500
5000
7500
10000
0.00000
0.00005
0.00010
0.00015

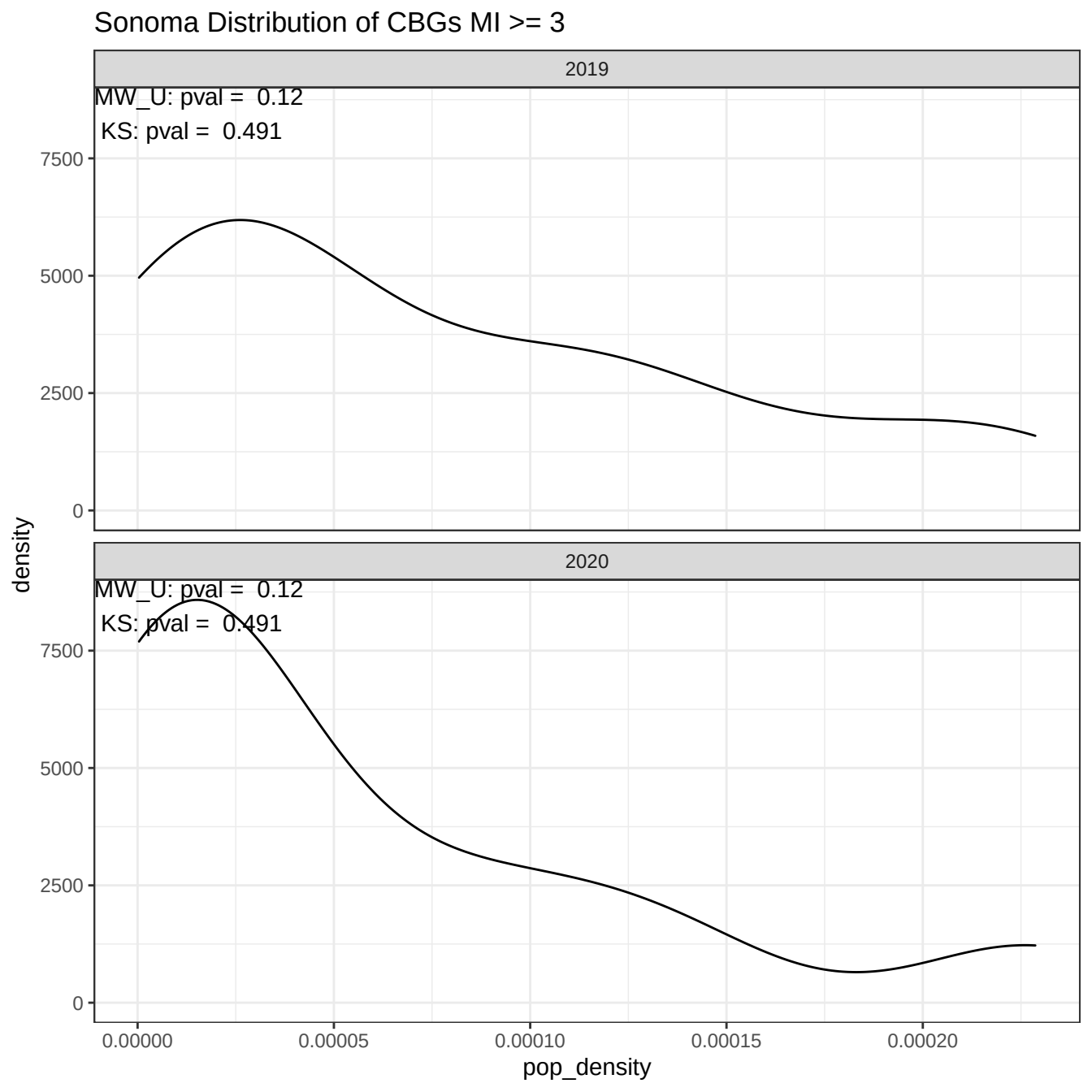

Solano Distribution of CBGs MI >= 3
2019
Dense CBGs 2019: 0 2020: 0
Binom Prob Success:0 p value:1 null:0
2020
Dense CBGs 2019: 0 2020: 0
Binom Prob Success:0 p value:1 null:0
count
2.0
1.5
1.0
0.5
0.0
0.00000
0.00005
0.00010
0.00015
pop_density

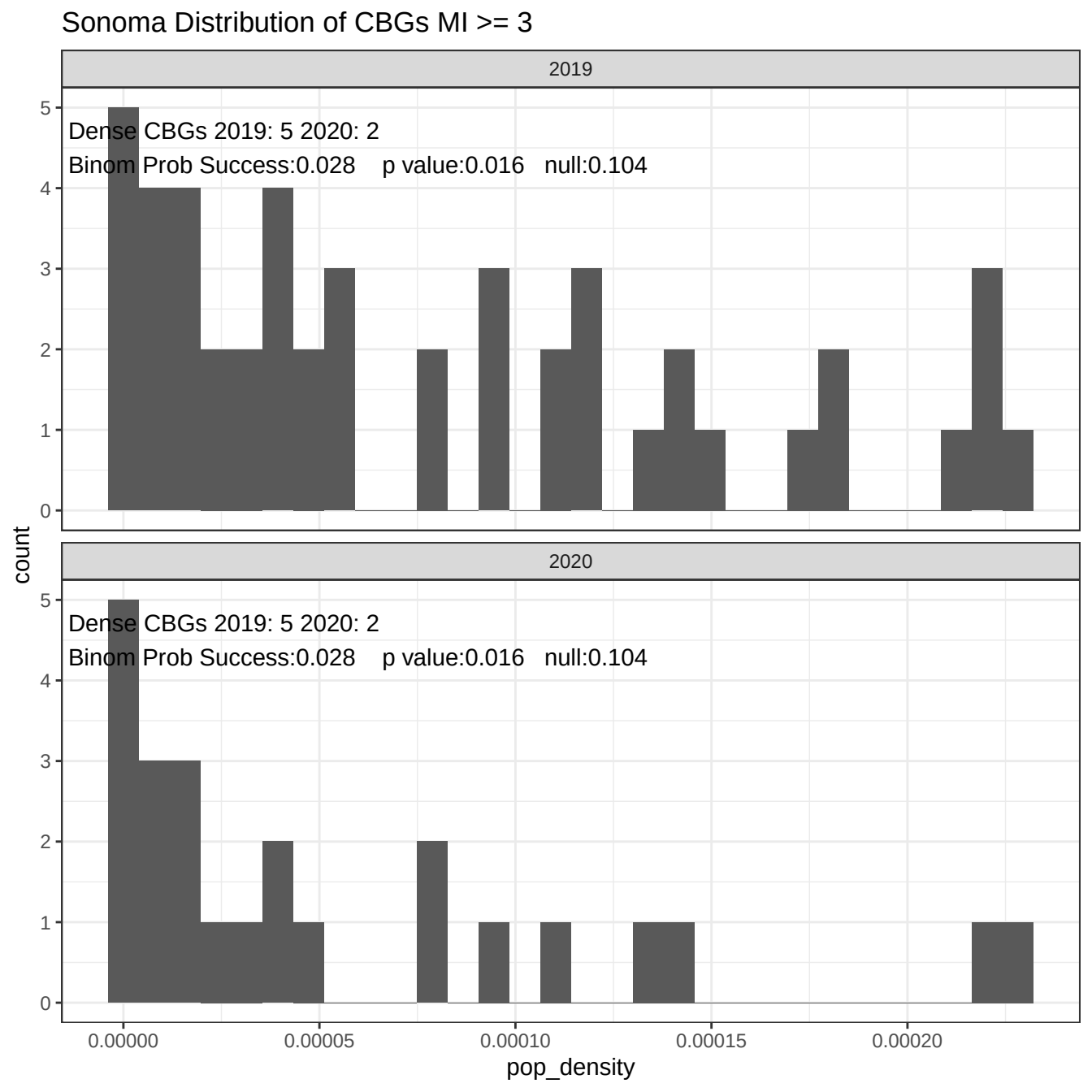

Solano Distribution of Pop Density MI >= 3 (all incl outliers)
06095
MW_U: pval = 0.104
KS: pval = 0.487
pop_density
0.00015
0.00010
0.00005
0.00000
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

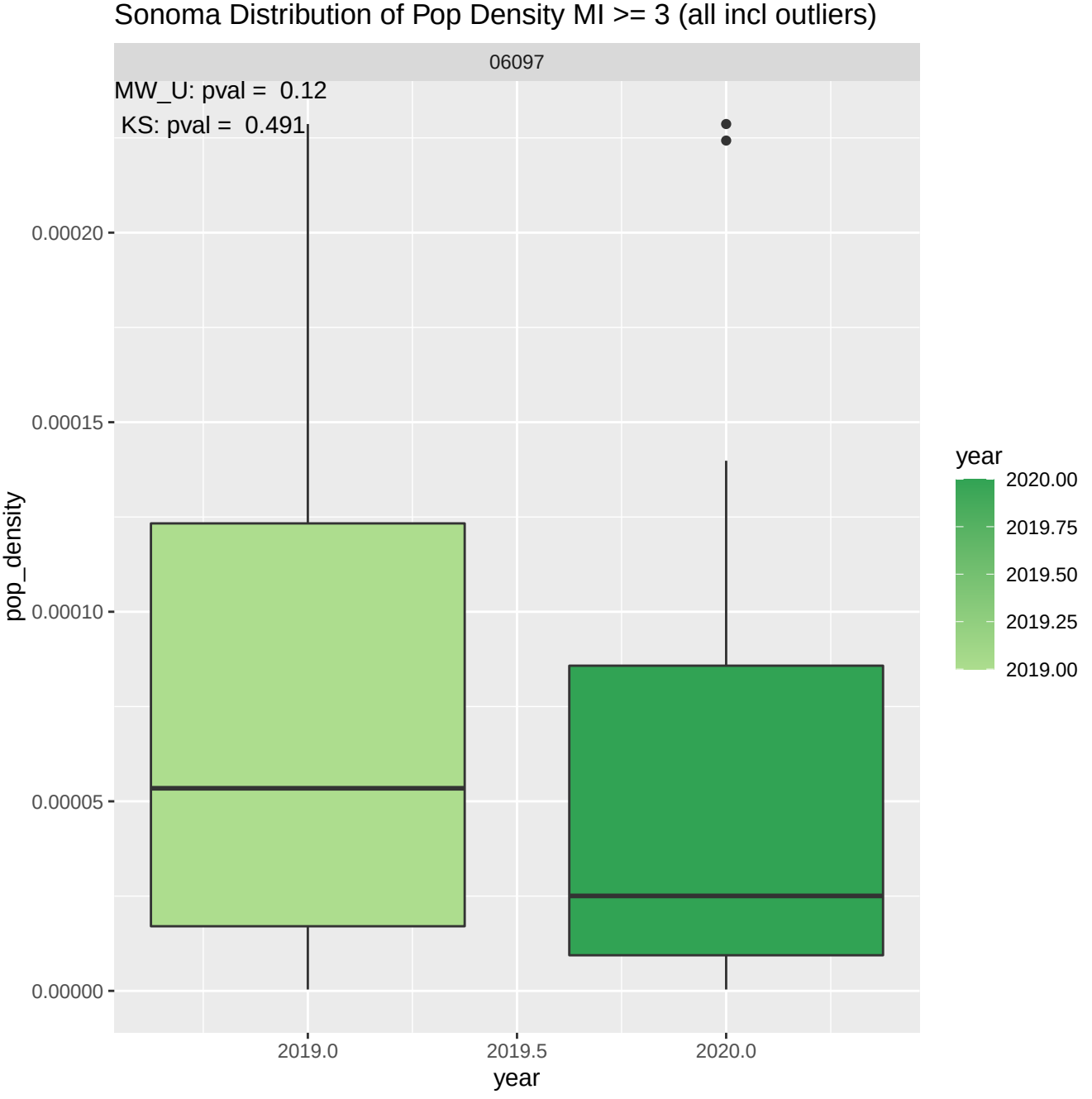

Solano Distribution of Pop Density MI >= 3 (no outliers)
06095
MW_U: pval = 0.104
KS: pval = 0.487
0.00020
0.00015
0.00010
0.00005
0.00000
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00

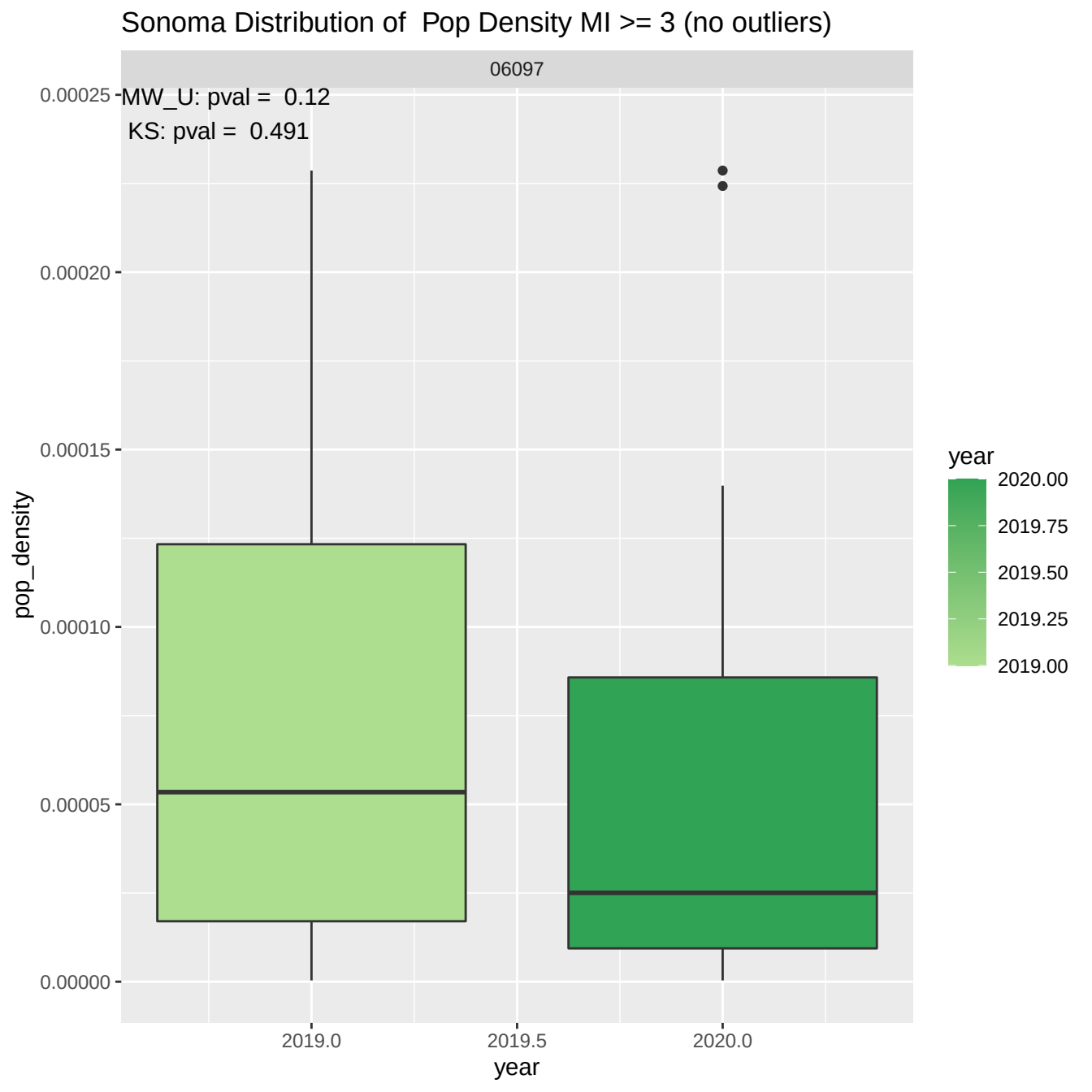

Sonoma Summer Mobility Over 34 Degrees
2019
2020
38.8°N
38.7°N
38.6°N
38.5°N
38.4°N
38.3°N
38.2°N
38.1°N
123.4°W
123.2°W
123°W
122.8°W
122.6°W
122.4°W
yvar_cut
(−1,0]
(0,1]
(1,2]
(2,3]
(3,4]
(4,5]
(5,Inf]


Sonoma Summer Mobility Over 34 Degrees & MI >= 3
2019
2020
38.8°N
38.7°N
38.6°N
38.5°N
38.4°N
38.3°N
38.2°N
38.1°N
123.4°W
123.2°W
123°W
122.8°W
122.6°W
122.4°W
yvar
12.5
10.0
7.5
5.0


Sonoma Distribution of CBGs MI >= 3
2019
MW_U: pval = 0.12
KS: pval = 0.491
2020
MW_U: pval = 0.12
KS: pval = 0.491
density
7500
5000
2500
0
0.00000
0.00005
0.00010
0.00015
0.00020
pop_density


Sonoma Distribution of CBGs MI >= 3
2019
Dense CBGs 2019: 5 2020: 2
Binom Prob Success:0.028 p value:0.016 null:0.104
2020
Dense CBGs 2019: 5 2020: 2
Binom Prob Success:0.028 p value:0.016 null:0.104
count
0
1
2
3
4
5
0.00000
0.00005
0.00010
0.00015
0.00020
pop_density


Sonoma Distribution of Pop Density MI >= 3 (all incl outliers)
06097
MW_U: pval = 0.12
KS: pval = 0.491
0.00020
0.00015
0.00010
0.00005
0.00000
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00


Sonoma Distribution of Pop Density MI >= 3 (no outliers)
06097
MW_U: pval = 0.12
KS: pval = 0.491
0.00025
0.00020
0.00015
0.00010
0.00005
0.00000
pop_density
2019.0
2019.5
2020.0
year
year
2020.00
2019.75
2019.50
2019.25
2019.00