UVA Test Rugosity

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UVA Plot A4-01 West

A4–01 West
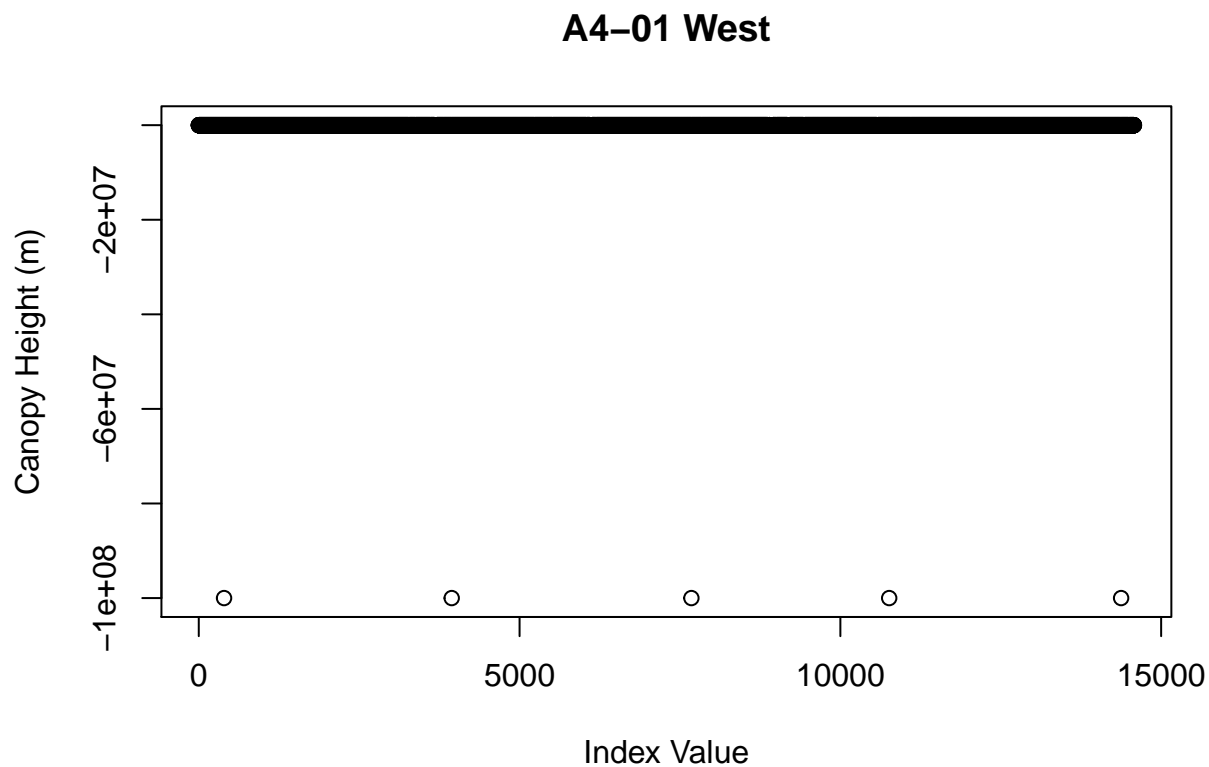

```
## Canopy Porosity (%)

## [1] 1.795165

## Cover Fraction (%)

## [1] 98.20483

## Max canopy height bin (m)

## [1] 26

## Transect Length (m)
```

```
## [1] 40
##    xbin    std.bin       stdstd
## 1     1 16.6382921 1.064741e+01
## 2     2 12.8975000 6.397904e+00
## 3     3 16.9277071 1.102105e+01
## 4     4 20.0489904 1.546008e+01
## 5     5  4.8871877 9.186386e-01
## 6     6  6.0669977 1.415710e+00
## 7     7 10.5335299 4.267510e+00
## 8     8 31.7831784 3.885271e+01
## 9     9 72.4041013 2.016290e+02
## 10   10  7.0882764 1.932449e+00
## 11   11  0.8836473 3.003202e-02
## 12   12  3.3371014 4.283171e-01
## 13   13  2.2511204 1.949055e-01
## 14   14  3.0645077 3.612003e-01
## 15   15  4.3877969 7.404908e-01
## 16   16 12.9071690 6.407500e+00
## 17   17  5.4333731 1.135444e+00
## 18   18  4.1950822 6.768737e-01
## 19   19 19.5733145 1.473518e+01
## 20   20  2.3440156 2.113234e-01
## 21   21 15.3784980 9.096085e+00
## 22   22  0.9867947 3.745245e-02
## 23   23  3.1966650 3.930257e-01
## 24   24 11.6296322 5.201859e+00
## 25   25  0.2779450 2.971286e-03
## 26   26  3.9183954 5.905316e-01
## 27   27  4.6717678 8.394390e-01
## 28   28  3.0048454 3.472729e-01
## 29   29  2.4134895 2.240358e-01
## 30   30 36.9573486 5.253252e+01
## 31   31  1.9457759 1.456171e-01
## 32   32  3.5957365 4.972816e-01
## 33   33 55.1562688 1.170082e+02
## 34   34  9.2217619 3.270804e+00
## 35   35  8.9489009 3.080109e+00
## 36   36 10.0893095 3.915160e+00
## 37   37 10.0250951 3.865482e+00
## 38   38 15.5681392 9.321806e+00
## 39   39  8.3598623 2.687973e+00
## 40   40  5.0079367 9.645934e-01


## Square of leaf height variance (stdStd from old script)


## [1] 531.486


## Mean Standard deviation of leaf heights


## [1] 0.4500068


## Maximum VAI
```
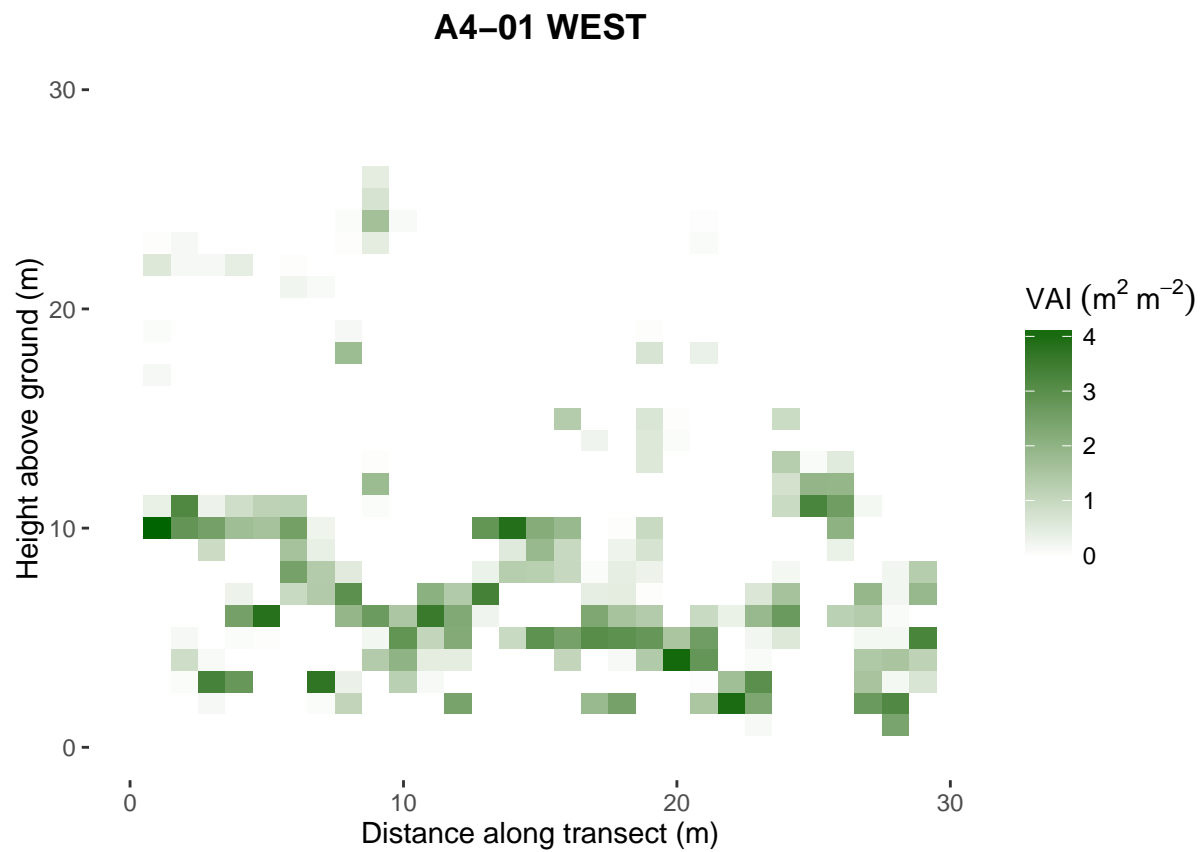
```
## [1] 4.189534

## Canopy Rugosity

## [1] 23.04959

## Warning: Removed 270 rows containing missing values (geom_tile).
```
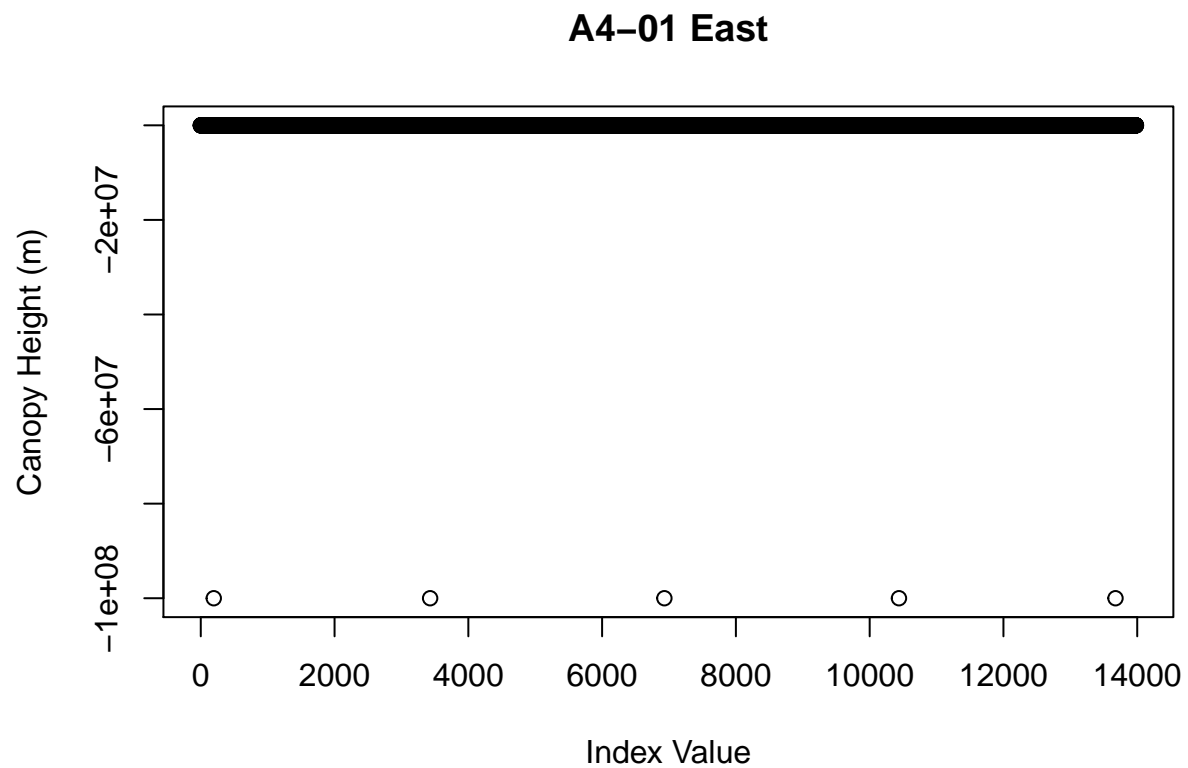
A4–01 WEST

A4–01 East


```
## Canopy Porosity (%)

## [1] 2.640754

## Cover Fraction (%)

## [1] 97.35925

## Max canopy height bin (m)

## [1] 28

## Transect Length (m)

## [1] 40
##   xbin      std.bin        stdstd
## 1     1  83.8332869 2.510007e+02
## 2     2 116.3863222 4.837777e+02
## 3     3   1.2531740 5.608733e-02
## 4     4   3.3650812 4.044204e-01
## 5     5  91.0032297 2.957710e+02
## 6     6   0.2496240 2.225434e-03
```

```
## 7     7   0.1108209 4.386167e-04
## 8     8  17.9923459 1.156159e+01
## 9     9  10.3333914 3.813535e+00
## 10   10  16.0552056 9.206058e+00
## 11   11  42.7086122 6.514377e+01
## 12   12  41.5687675 6.171294e+01
## 13   13  41.1769487 6.055504e+01
## 14   14   0.3614867 4.666879e-03
## 15   15  47.6198730 8.098758e+01
## 16   16   6.2878490 1.412037e+00
## 17   17   1.3676734 6.680466e-02
## 18   18   0.9751930 3.396433e-02
## 19   19 114.2721042 4.663612e+02
## 20   20  50.2998522 9.035983e+01
## 21   21  18.7139953 1.250763e+01
## 22   22  15.0021815 8.038052e+00
## 23   23   3.9528212 5.580284e-01
## 24   24   4.6835269 7.834080e-01
## 25   25  18.9615265 1.284070e+01
## 26   26  39.2435673 5.500206e+01
## 27   27   7.2371510 1.870584e+00
## 28   28   3.8604727 5.322589e-01
## 29   29  43.7909142 6.848729e+01
## 30   30  45.4075617 7.363738e+01
## 31   31  31.7910357 3.609536e+01
## 32   32  27.0019928 2.603956e+01
## 33   33  38.4441541 5.278404e+01
## 34   34   8.1294722 2.360297e+00
## 35   35  20.4179076 1.488896e+01
## 36   36  35.3156743 4.454274e+01
## 37   37  73.0129331 1.903889e+02
## 38   38  62.4579191 1.393211e+02
## 39   39  58.6881297 1.230106e+02
## 40   40  58.9651495 1.241746e+02


## Square of leaf height variance (stdStd from old script)

## [1] 2870.095

## Mean Standard deviation of leaf heights

## [1] 1.162767

## Maximum VAI

## [1] 4.277515

## Canopy Rugosity

## [1] 53.56065

## Warning: Removed 290 rows containing missing values (geom_tile).
```
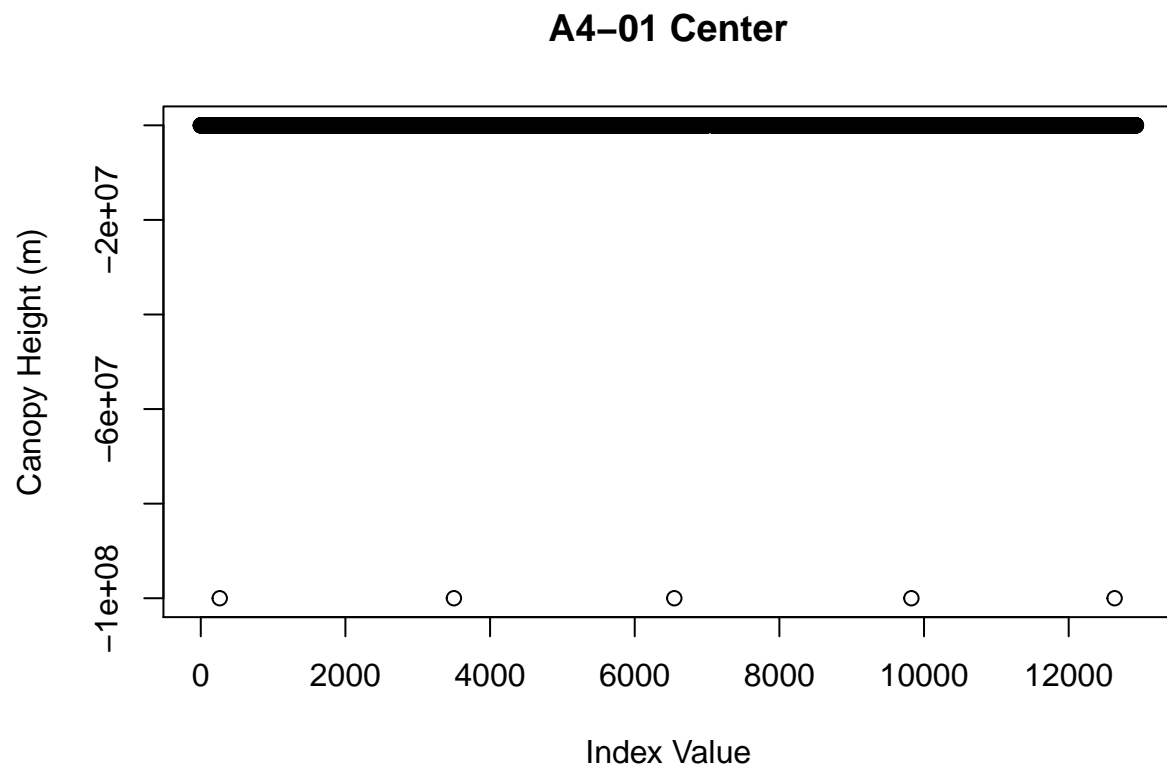
A4–01 East

A4–01 Center

Canopy Porosity (%)

[1] 5.859533

Cover Fraction (%)

[1] 94.14047

Max canopy height bin (m)

[1] 29

Transect Length (m)

[1] 40
```
##   xbin    std.bin       stdstd
## 1    1   2.506983   0.21672291
## 2    2   3.827722   0.50522252
## 3    3   0.913027   0.02874546
## 4    4  17.907845  11.05830675
## 5    5  64.302436 142.57942185
## 6    6  22.125411  16.88047703
```

```
## 7      7 28.317259  27.65059218
## 8      8 14.987176   7.74536025
## 9      9 11.901488   4.88432509
## 10    10 46.889701  75.81531113
## 11    11 36.355106  45.57564566
## 12    12 15.625834   8.41954147
## 13    13 45.312055  70.79939016
## 14    14 46.479291  74.49394779
## 15    15 34.479127  40.99345560
## 16    16 27.374770  25.84062141
## 17    17  1.777106   0.10890015
## 18    18 14.315593   7.06676585
## 19    19 22.102030  16.84481761
## 20    20 78.380769 211.84637760
## 21    21 49.640062  84.97019902
## 22    22 81.298914 227.91425610
## 23    23 31.518097  34.25484377
## 24    24 33.400871  38.46959267
## 25    25  3.428722   0.40538404
## 26    26 11.503513   4.56313122
## 27    27 14.075150   6.83137420
## 28    28 26.263831  23.78582044
## 29    29  2.830490   0.27626460
## 30    30 51.139003  90.17922709
## 31    31 45.439520  71.19827548
## 32    32  2.084872   0.14988595
## 33    33 90.290564 281.11675562
## 34    34 54.560289 102.64914081
## 35    35  8.492189   2.48680277
## 36    36  3.228012   0.35931245
## 37    37  6.054808   1.26416208
## 38    38  3.671170   0.46474108
## 39    39  6.305742   1.37111647
## 40    40 11.385730   4.47016690
```

```
## Square of leaf height variance (stdStd from old script)
```

```
## [1] 1766.534
```

```
## Mean Standard deviation of leaf heights
```

```
## [1] 0.9245623
```

```
## Maximum VAI
```

```
## [1] 4.191181
```

```
## Canopy Rugosity
```

```
## [1] 42.01999
```

```
## Warning: Removed 300 rows containing missing values (geom_tile).
```

A4−01 Center

VAI (m² m⁻²)