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|  | **Algorithm** | **Parameter** | **Description** | **Tested values** |
| 1 | Li (2012) | dt1 | Threshold 1. Refer to p. 79 in Li et al. (2012) | 0.5, 1.0, 1.5, 2.0 |
|  |  | dt2 | Threshold 2. Refer to p. 79 in Li et al. (2012) | 0.5, 1.0, 1.5, 2.0 |
|  |  | hmin | Minimum height threshold in m, below which a new tree cannot be initiated | 1.3 |
|  |  | R | Search radius. Refer to p. 79 in Li et al. (2012) | 0, 1, 2 |
|  |  | Zu | Height switch for dt1 and dt2. Use dt1 unless point height > Zu; then use dt2 | 14, 15, 16 |
| 2 | LMF-auto (Jean-Romain et al. *in prep*) | NA | LMF-auto is parameterless by design | NA |
| 3 | LMF fixed-window (Popescu and Wynne 2004) | ws | Window size: side length or diameter of the moving window used to detect the local maxima | The sequence 0.2:10.0 incrementing by 0.2 |
|  |  | shape | Shape of the window, either circular or square | circular, square |
|  |  | hmin | Minimum height threshold in m, below which a new tree cannot be initiated | 1.3 |
| 4 | LMF variable-window (Popescu and Wynne 2004) | b0 | First coefficient, β\_0 on the function for computing variable-window size: | 0.5, 1.0, 1.5, 2.0, 2.5 |
|  |  | b1 | Second coefficient β\_1 on the variable window size function | 0.02, 0.04, 0.06, 0.08, 0.10, 0.12, 0.14, 0.16 |
|  |  | c0 | Third coefficient β\_2 on the variable window size function | 1, 2, 3, 4, 5 |
|  |  | shape | Shape of the window, either circular or square | circular, square |
|  |  | hmin | Minimum height threshold in m, below which a new tree cannot be initiated | 1.3 |
| 5 | LayerStacking (Ayrey 2017) | start | the starting height above ground at which layer divisions begin | 0.5 |
|  |  | resolution | Resolution of the CHM | 0.5, 1 |
|  |  | window1 | window radius for the first local maximum filter for detecting tree tops | 1, 2, 3 |
|  |  | buffer | size of the buffer enforced around each point to create a polygonal cluster | 1, 2, 3 |
|  |  | hardwood | logical switch, where False adds weight to clusters to account for mid-canopy density in conifer stands | F |
|  |  | window2 | window radius for the second local maximum filter for detecting tree tops | 0.2, 0.4, 0.6, 0.8 |
|  |  | hmin | Minimum height threshold in m, below which a new tree cannot be initiated | 1.3 |
| 6 | MultiCHM (Eysn 2015) | resolution | Resolution of the CHM | 0.5, 1 |
|  |  | layer\_thickness | The eliminating layer in the original paper is defined as a layer of `layer\_thickness` m below the current CHM. Refer to Eysn 2015 p. 1728). | 0.25, 0.5 |
|  |  | dist\_2d | 2D threshold for delineating a tree from local maximum. A tree is created if no other detected tree lies within this distance | 0.1, 0.25, 0.5, 1, 2 |
|  |  | dist\_3d | 3D threshold for delineating a tree from local maximum. A tree is created if no other detected tree lies within this distance | 0.5, 1, 3, 5 |
| 7 | PTrees (Vega 2014) | k | Number of nearest neighbors to use in search. Refer to Vega (2014). | Forward and reverse permutations of: {5, 6, 7, 8, 10, 12, 15, 20, 25, 30, 40, 60, 80, 100} |
|  |  | hmin | Minimum height of a detected tree. Addition not in the original paper included to reduce oversegmentation. | 1.3 |
| 8 | Inverted watershed (Koch et al. 2006) | resolution | Resolution of the CHM | 0.5, 1, 1.5, 2 |
|  |  | th\_tree | Minimum height threshold in m, below which a new tree cannot be initiated | 1.3 |
|  |  | subcircle\_size | radius of circles used to rasterize the point cloud to CHM | 0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8 |
|  |  | kernel\_size | Size of kernel to smoothe CHM before applying watershed algorithm | 3, 5, 9, 15 |
|  |  | tolerance | Minimum Z distance between a tree candidate's highest point and the point where it contacts another tree. If Z distance < tolerance, the object is merged with its highest neighbor. | 1 |
|  |  | ext | Search radius in pixels for neighboring trees | 1 |