



GeoCue Group Support

April 6, 2016

Revision 1.0

Classify by Statistics is a Point Cloud Task in LP360 that can be created by selecting the “Add Task...” option under the Point Cloud Tasks menu. Classify by Statistics is primarily useful for general [data thinning](#) – especially useful for very dense data such as that derived from imagery (dense image matching, DIM data). For example, you can set the grid size to 2 meter and choose a median selector, such as one point. You will then have a 0.5 points/m² point cloud based on the median points from the dense data.

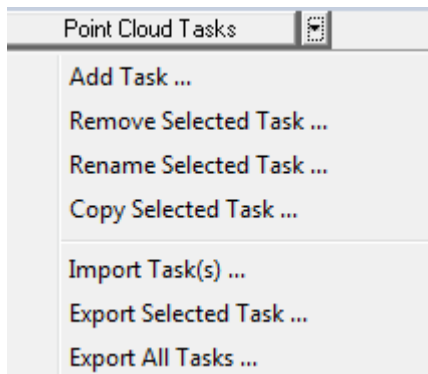


Figure 1: Point Cloud Task Menu

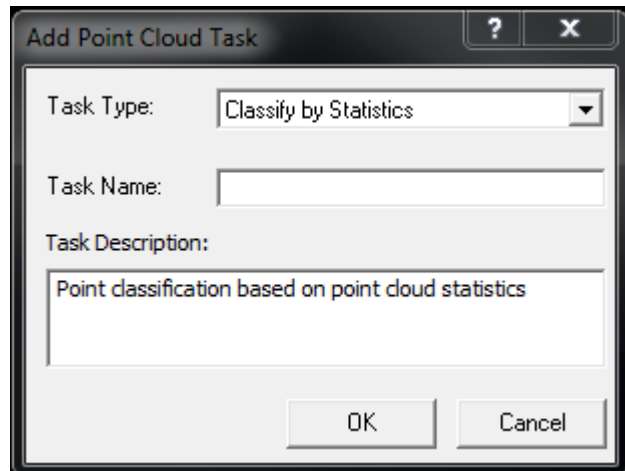


Figure 2: Add Point Cloud Task

Once the Classify by Statistics Point Cloud Task has been created, the desired properties will need to be selected (an example can be seen below in *Figure 3*).

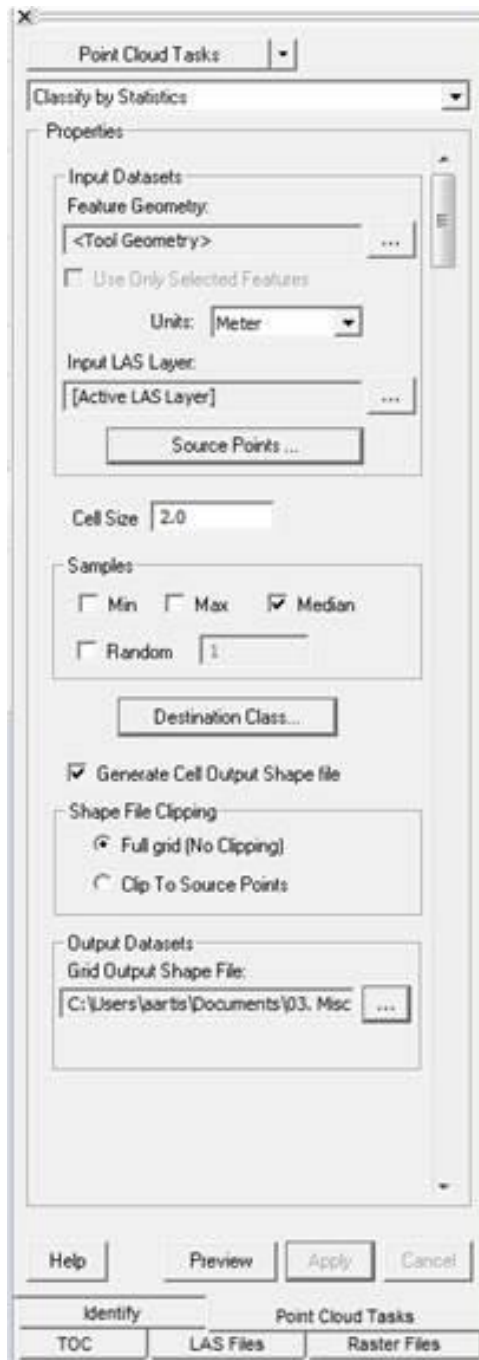


Figure 3: Classify by Statistics Point Cloud Task Menu

For this example, a “thinned” ground surface is desired. Therefore, “ground” points have been selected as the source points (Figure 4).

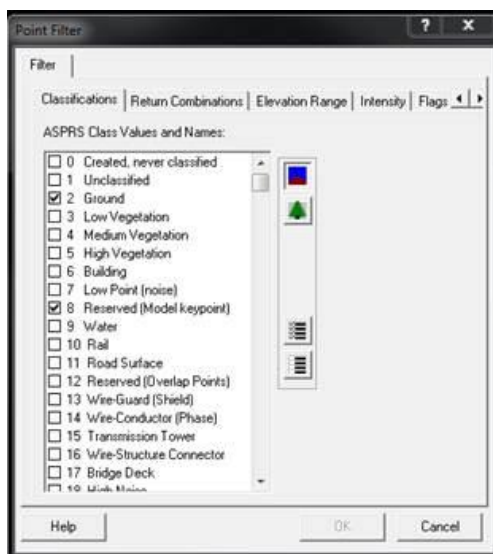


Figure 4: Point Filter Selection Menu

The end goal is to separate the “thinned” ground from the rest of the ground points so the destination class will be set to one of the classes not currently in use. For this example, Class 20, the reserved class, has been chosen.



Figure 5: Destination Class Selection Menu

The changes to the Point Cloud Task have been applied, and the task has been run on the desired area. A very small area has been chosen for this example.

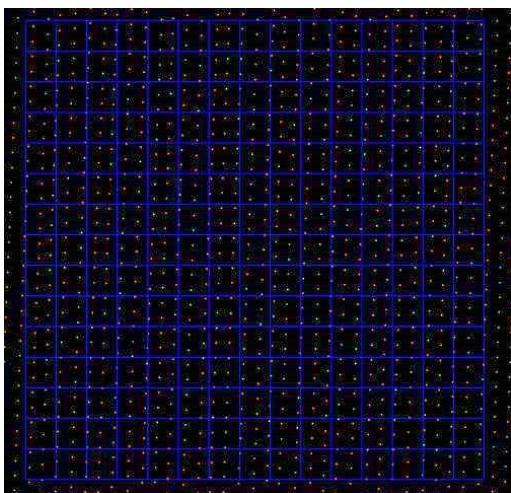


Figure 6: Ground points within grid

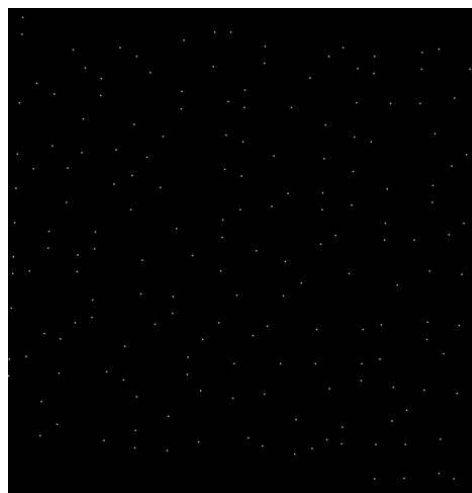


Figure 7: Reclassified ground points in Class 20

Within the grid (*Figure 6*), the ground points that have been reclassified to the reserved class, Class 20, can be identified. *Figure 7* shows the newly classified points which can be viewed more easily when the grid is turned off and only the points in Class 20 are made visible. The points now can be exported from LP360 as a LAS file using the LP360 Export Wizard.