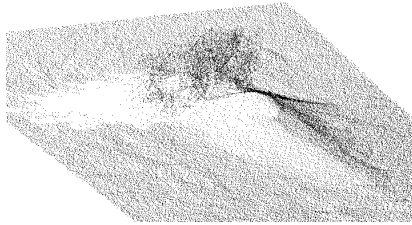
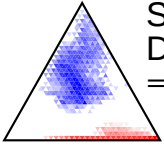


Raw LiDAR data (XYZ)

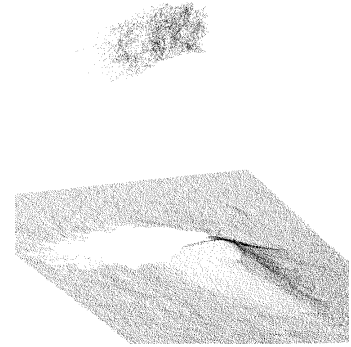
Vegetation Sample



**Step 1: Preparation
of at least one
example of each class**
[Cloud Compare](#)



Step 2.5 (advanced option)
Density profiles at various scales
⇒ Refine the choice of scales
[density](#)



Floor Sample

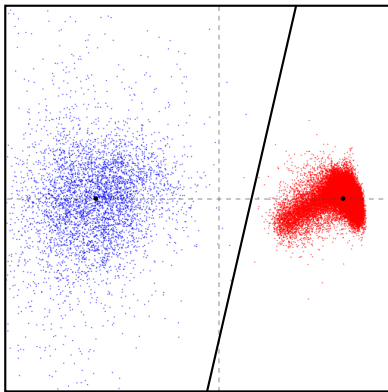
Multiscale files
– vegetation.msc
– floor.msc

Step 2: Choice of a set of scales
(ex: from 4cm to 20cm every 2cm)
[canupo](#)

Step 3: Builds a classifier for separating the classes
[suggest_classifier_lda](#)

(advanced option: provide unlabelled points from the whole scene.msc for better results)

Classifier proposal,
SVG graphics file



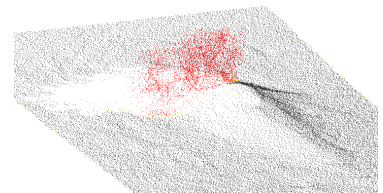
Step 3.5 (advanced option)
Open, review and edit the classifier (with [Inkscape](#))
Shift and/or add more points to the decision
boundary to make it non-linear, etc.

Step 4: Validation
[validate_classifier](#)

(advanced option: specify class
numbers for automated
multi-class scenarios)

Ready-to-use classifier,
PRM parameters file

**Step 5: Classification
of the whole scene**
[classify](#)



Step 4.5 (advanced option) [combine_classifiers](#)
Perform steps 1-4 on samples from other classes
Then combine the multiple binary PRM files
into a single multiclass PRM file

**Classification of new scenes
with the same classifier**

[canupo, classify](#)

(advanced option: compute the multiscale
and classes on selected “core” points
for faster computations at the cost of less
precision. [subsample](#))

