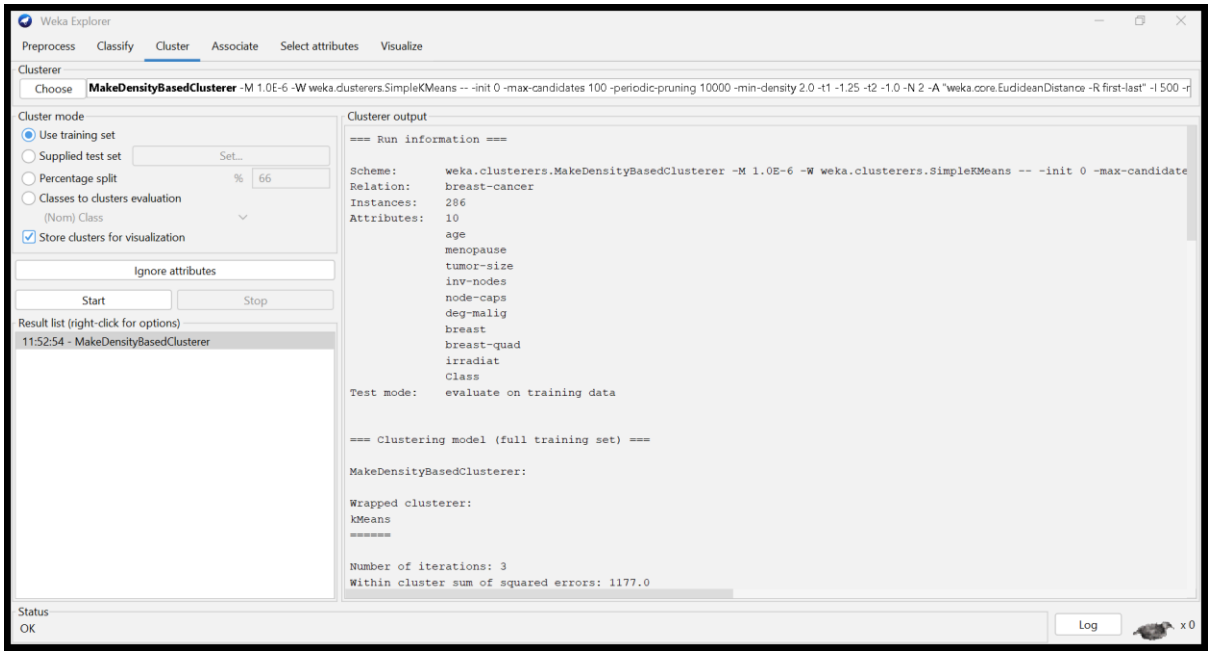
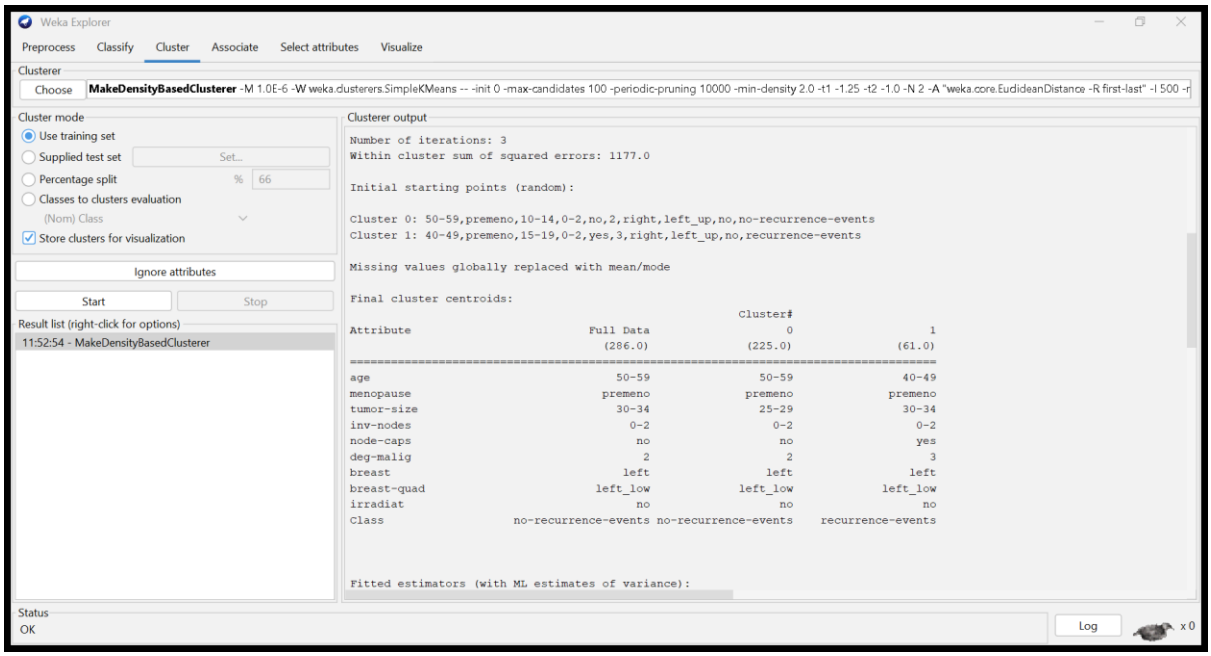

Weka Explorer
Preprocess
Classify
Cluster
Associate
Select attributes
Visualize
Clusterer
Choose
MakeDensityBasedClusterer -M 1.0E-6 -W weka.clusterers.SimpleKMeans -- -init 0 -max-candidates 100 -periodic-pruning 10000 -min-density 2.0 -t1 -1.25 -t2 -1.0 -N 2 -A "weka.core.EuclideanDistance -R first-last" -I 500 -r
Cluster mode
Use training set
Supplied test set
Set...
Percentage split
%
66
Classes to clusters evaluation
(Nom) Class
Store clusters for visualization
Ignore attributes
Start
Stop
Result list (right-click for options)
11:52:54 - MakeDensityBasedClusterer
Clusterer output
=== Run information ===
Scheme: weka.clusterers.MakeDensityBasedClusterer -M 1.0E-6 -W weka.clusterers.SimpleKMeans -- -init 0 -max-candidate
Relation: breast-cancer
Instances: 286
Attributes: 10
age
menopause
tumor-size
inv-nodes
node-caps
deg-malig
breast
breast-quad
irradiat
Class
Test mode: evaluate on training data
=== Clustering model (full training set) ===
MakeDensityBasedClusterer:
Wrapped clusterer:
kMeans
======
Number of iterations: 3
Within cluster sum of squared errors: 1177.0
Status
OK
Log
x 0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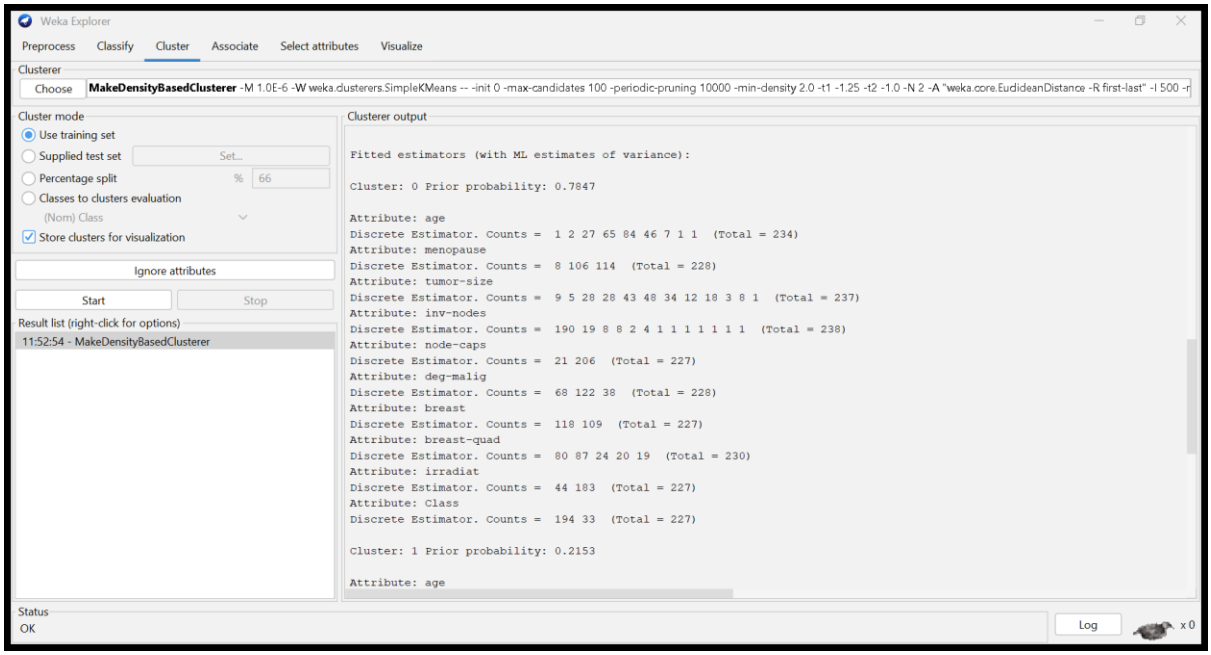
Cluster mode
Use training set
Supplied test set
Set...
Percentage split
%
66
Classes to clusters evaluation
(Nom) Class
Store clusters for visualization
Ignore attributes
Start
Stop
Result list (right-click for options)
11:52:54 - MakeDensityBasedClusterer
Clusterer output
Number of iterations: 3
Within cluster sum of squared errors: 1177.0
Initial starting points (random):
Cluster 0: 50-59,premeno,10-14,0-2,no,2,right,left_up,no,no-recurrence-events
Cluster 1: 40-49,premeno,15-19,0-2,yes,3,right,left_up,no,recurrence-events
Missing values globally replaced with mean/mode
Final cluster centroids:
Cluster#
Attribute Full Data 0 1
(286.0) (225.0) (61.0)
age 50-59 50-59 40-49
menopause premeno premeno premeno
tumor-size 30-34 25-29 30-34
inv-nodes 0-2 0-2 0-2
node-caps no no yes
deg-malig 2 2 3
breast left left left
breast-quad left_low left_low left_low
irradiat no no no
Class no-recurrence-events no-recurrence-events recurrence-events
Fitted estimators (with ML estimates of variance):
Status
OK
Log
x 0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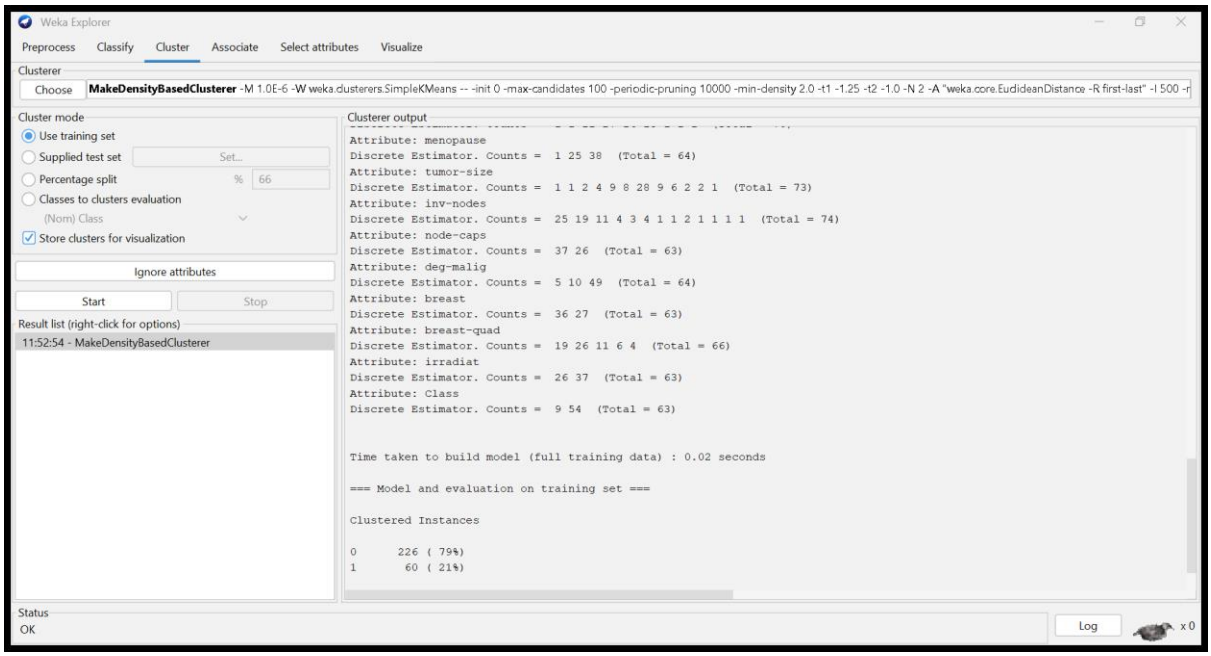
Cluster mode
Use training set
Supplied test set
Set...
Percentage split
%
66
Classes to clusters evaluation
(Nom) Class
Store clusters for visualization
Ignore attributes
Start
Stop
Result list (right-click for options)
11:52:54 - MakeDensityBasedClusterer
Clusterer output
Fitted estimators (with ML estimates of variance):
Cluster: 0 Prior probability: 0.7847
Attribute: age
Discrete Estimator. Counts = 1 2 27 65 84 46 7 1 1 (Total = 234)
Attribute: menopause
Discrete Estimator. Counts = 8 106 114 (Total = 228)
Attribute: tumor-size
Discrete Estimator. Counts = 9 5 28 28 43 48 34 12 18 3 8 1 (Total = 237)
Attribute: inv-nodes
Discrete Estimator. Counts = 190 19 8 8 2 4 1 1 1 1 1 1 1 (Total = 238)
Attribute: node-caps
Discrete Estimator. Counts = 21 206 (Total = 227)
Attribute: deg-malig
Discrete Estimator. Counts = 68 122 38 (Total = 228)
Attribute: breast
Discrete Estimator. Counts = 118 109 (Total = 227)
Attribute: breast-quad
Discrete Estimator. Counts = 80 87 24 20 19 (Total = 230)
Attribute: irradiat
Discrete Estimator. Counts = 44 183 (Total = 227)
Attribute: Class
Discrete Estimator. Counts = 194 33 (Total = 227)
Cluster: 1 Prior probability: 0.2153
Attribute: age
Status
OK
Log
x 0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Cluster mode
Use training set
Supplied test set
Set...
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%
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Classes to clusters evaluation
(Nom) Class
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Ignore attributes
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Result list (right-click for options)
11:52:54 - MakeDensityBasedClusterer
Clusterer output
Attribute: menopause
Discrete Estimator. Counts = 1 25 38 (Total = 64)
Attribute: tumor-size
Discrete Estimator. Counts = 1 1 2 4 9 8 28 9 6 2 2 1 (Total = 73)
Attribute: inv-nodes
Discrete Estimator. Counts = 25 19 11 4 3 4 1 1 2 1 1 1 1 (Total = 74)
Attribute: node-caps
Discrete Estimator. Counts = 37 26 (Total = 63)
Attribute: deg-malig
Discrete Estimator. Counts = 5 10 49 (Total = 64)
Attribute: breast
Discrete Estimator. Counts = 36 27 (Total = 63)
Attribute: breast-quad
Discrete Estimator. Counts = 19 26 11 6 4 (Total = 66)
Attribute: irradiat
Discrete Estimator. Counts = 26 37 (Total = 63)
Attribute: Class
Discrete Estimator. Counts = 9 54 (Total = 63)
Time taken to build model (full training data) : 0.02 seconds
=== Model and evaluation on training set ===
Clustered Instances
0 226 ( 79%)
1 60 ( 21%)
Status
OK
Log
x 0