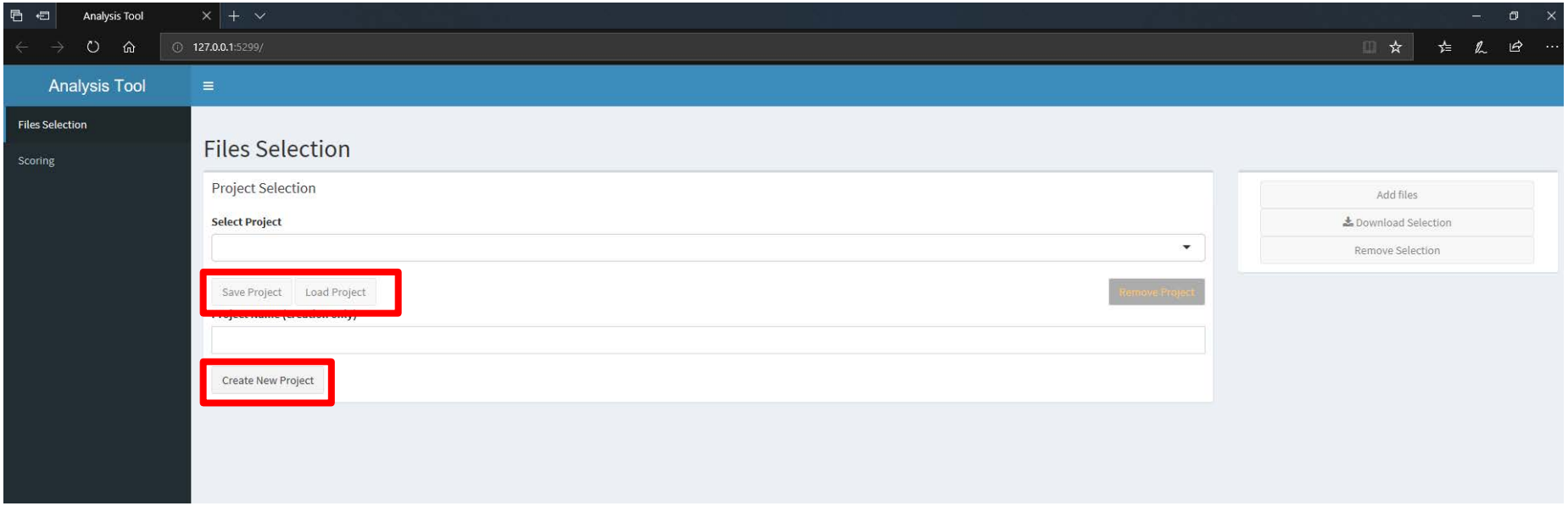
Analysis Tool

Manual

Isam BEN SOLTANE

Files Selection Tab

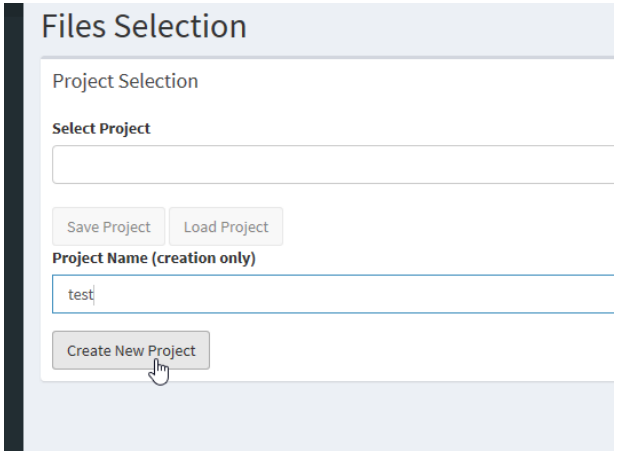


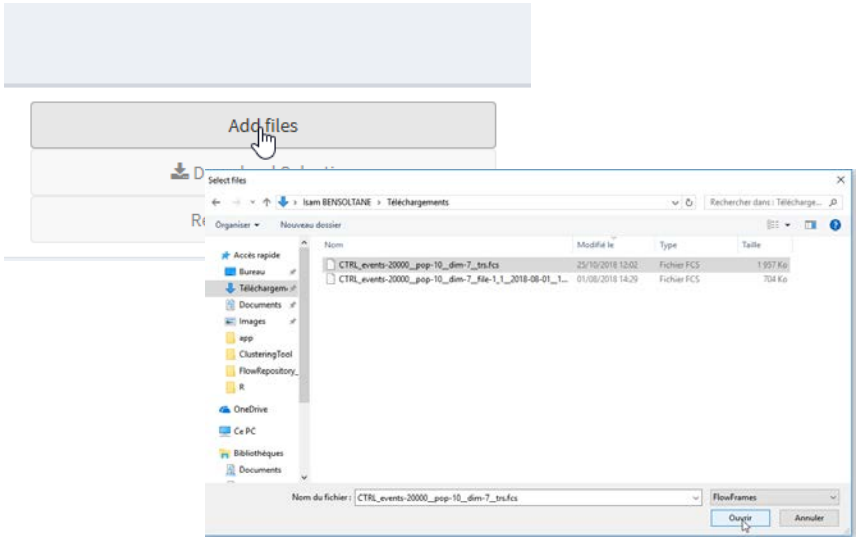
Files stored in projects:

- Local folders containing modified versions of the selected files
- **Creating a project**: Create an empty local folder
- **Load a project:** Load the files and the information of a project formerly created

SAVE THE PROJECT AFTER ADDING ALL THE FILES

Files Selection Tab





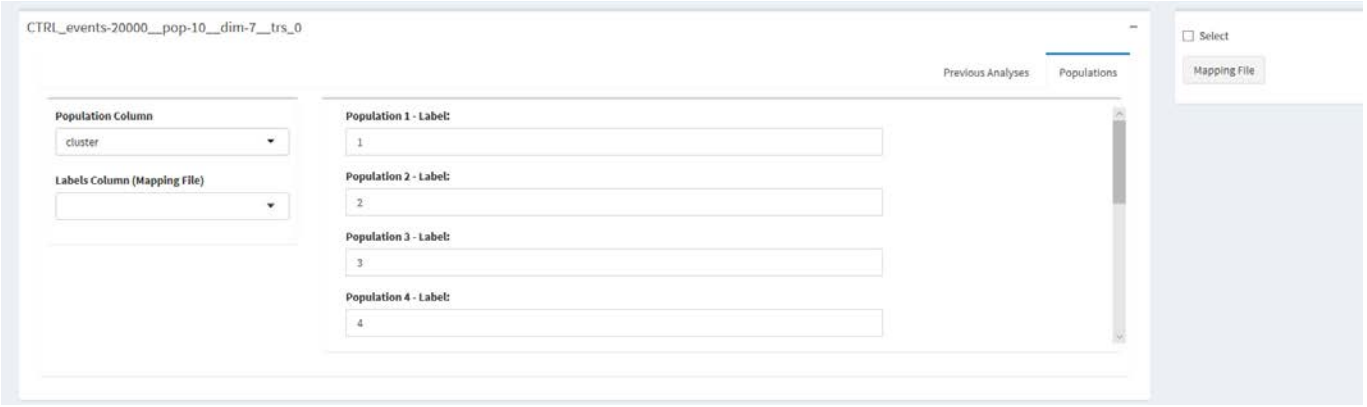
Creates a new project named test

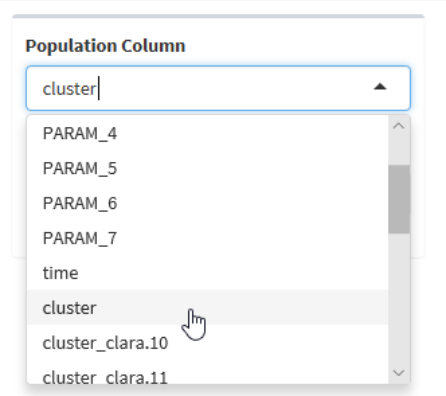
Add local files to the project:

- ENRICHED FCS FILE
- REQUIRED KEYWORDS

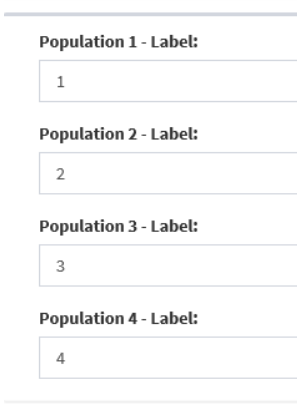
Use *Clustering Tool* or *Keywords Registor*

Files Selection Tab



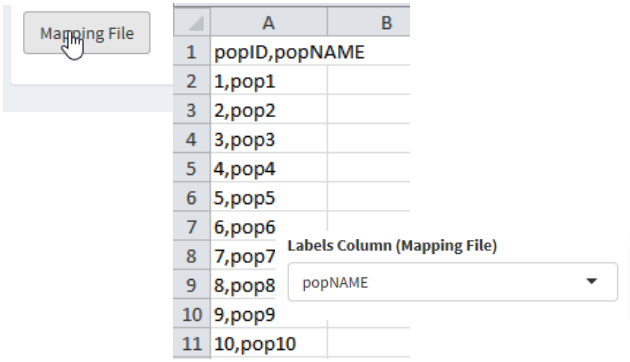


Select the column containing the populations labels



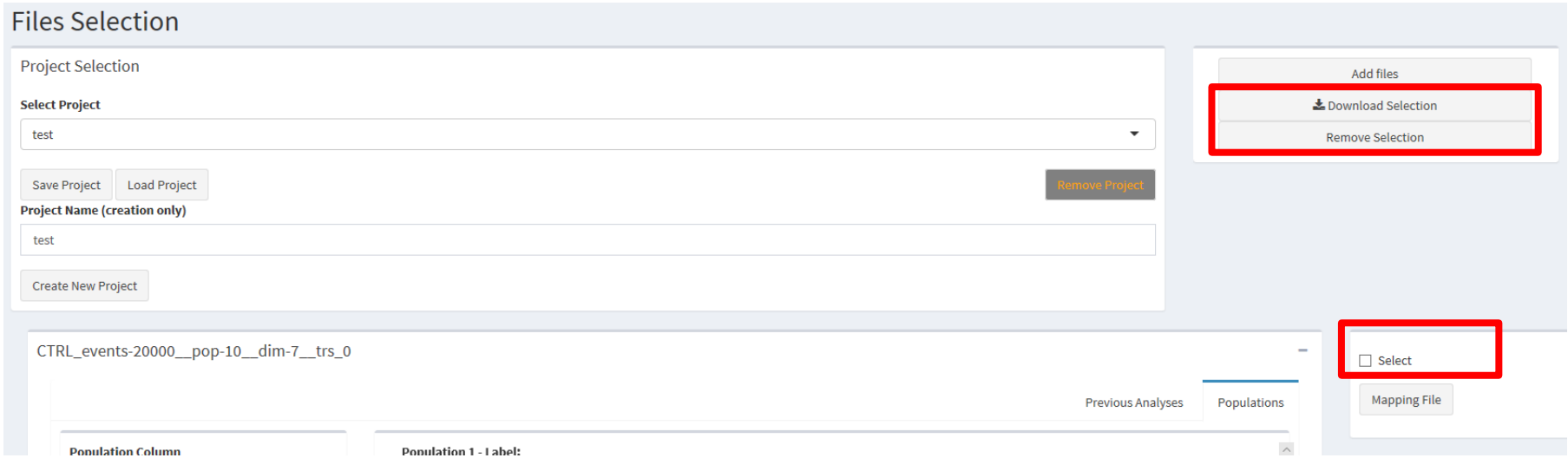
Rename each population

OR



Or load a mapping file (.csv)
eg: scaffold node landmarks

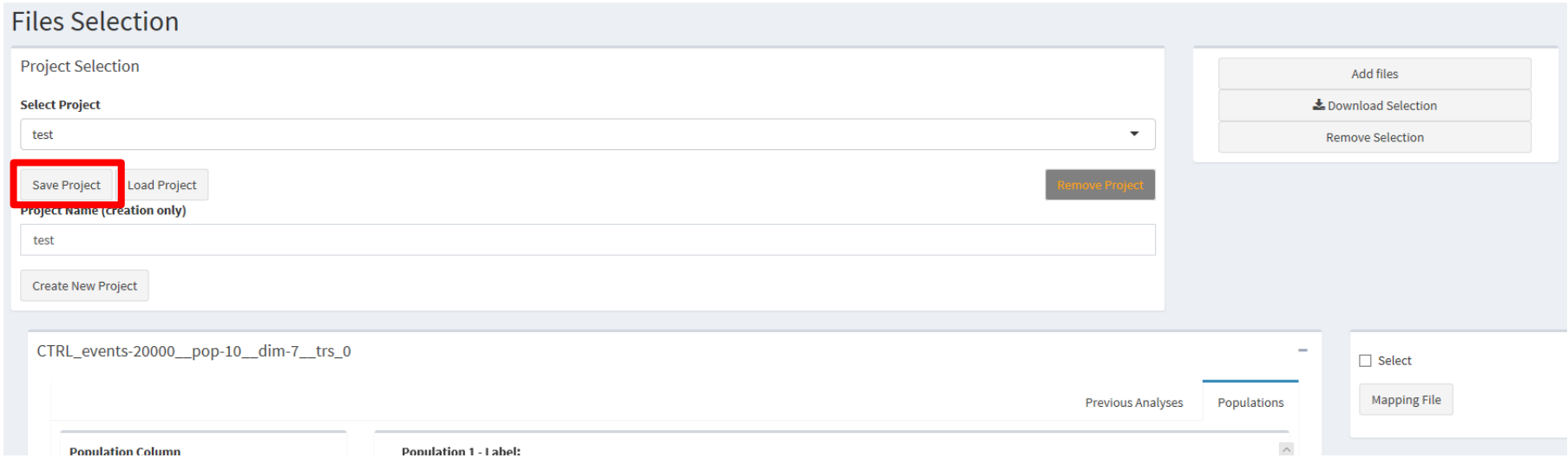
Files Selection Tab



Selected Files:

- Download the selected files stored in each project
- Remove all the selected files **and their information** from the project

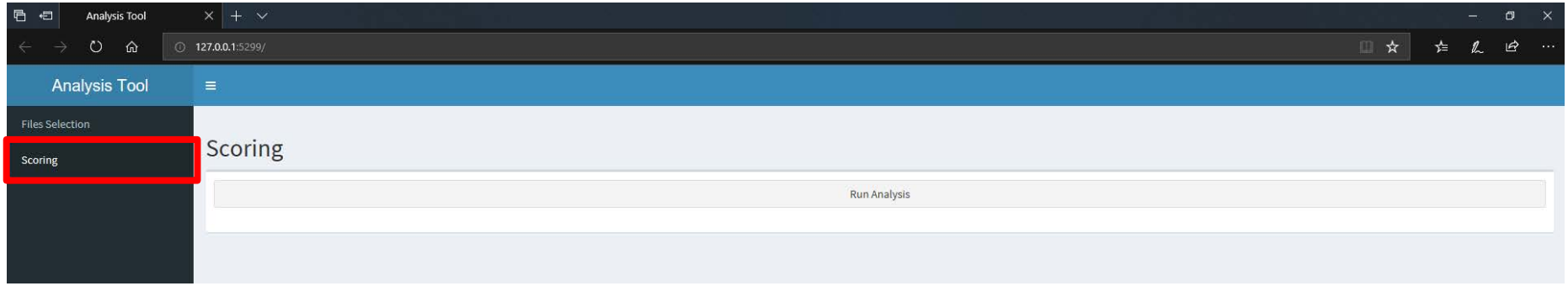
Files Selection Tab



Save Project:

- Save all the files and their information in the folder associated with the project

Scoring Tab

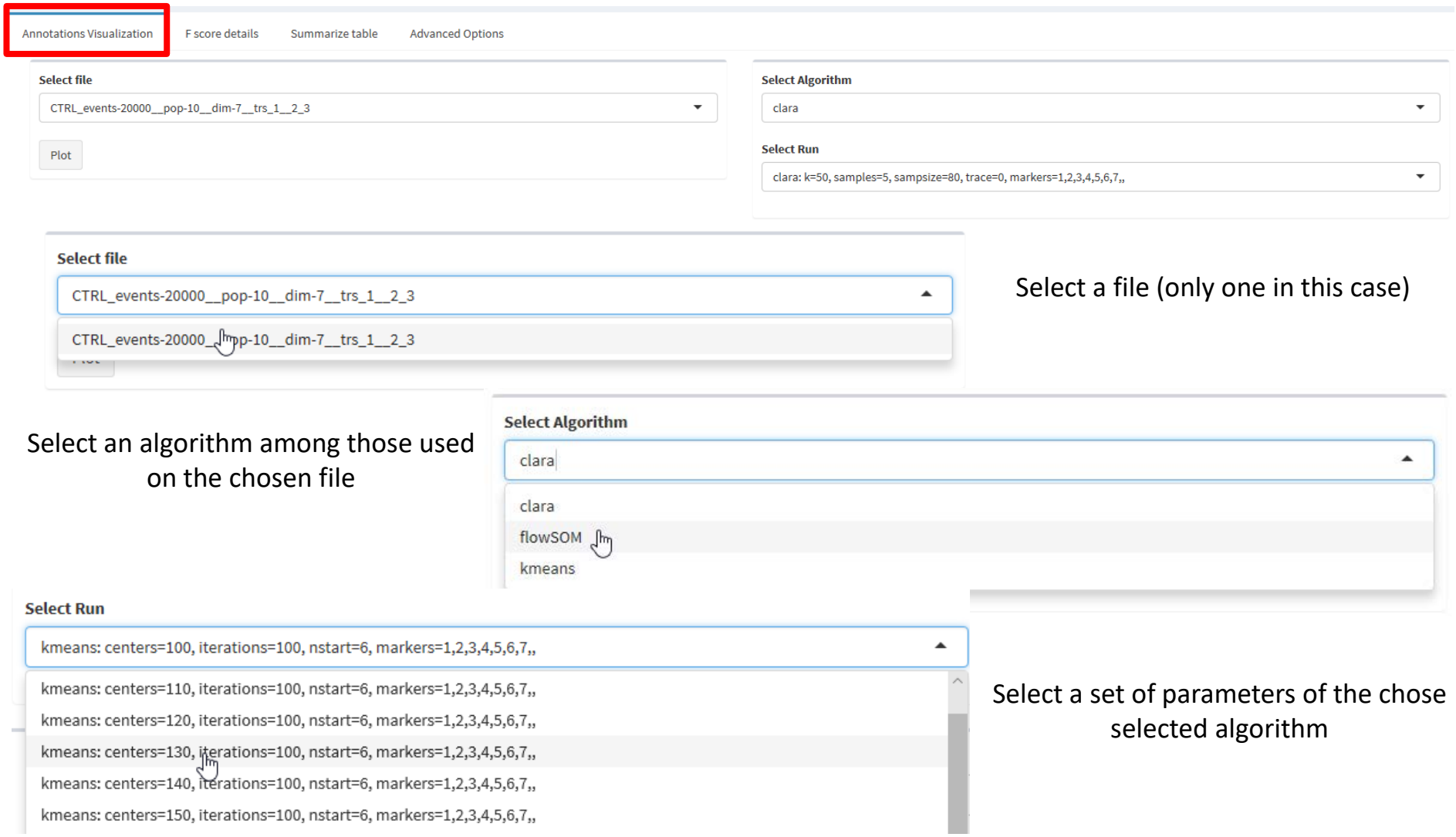


Run Analysis Button:

Compute the purity, precision, recall, FG matrices and clusters information for each registered set of parameters, for each algorithm

Scoring Tab

Visualization Panel : Annotations Visualization



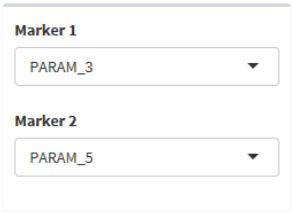
Select a file (only one in this case)

Select an algorithm among those used on the chosen file

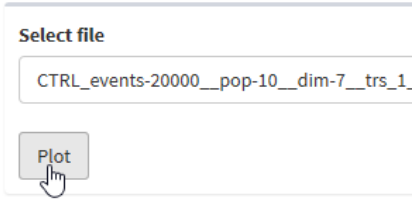
Select a set of parameters of the chose selected algorithm

Scoring Tab

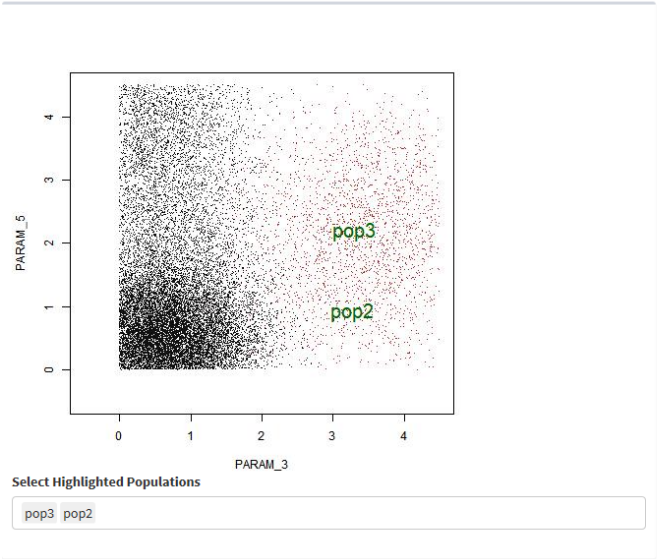
Visualization Panel : Annotations Visualization



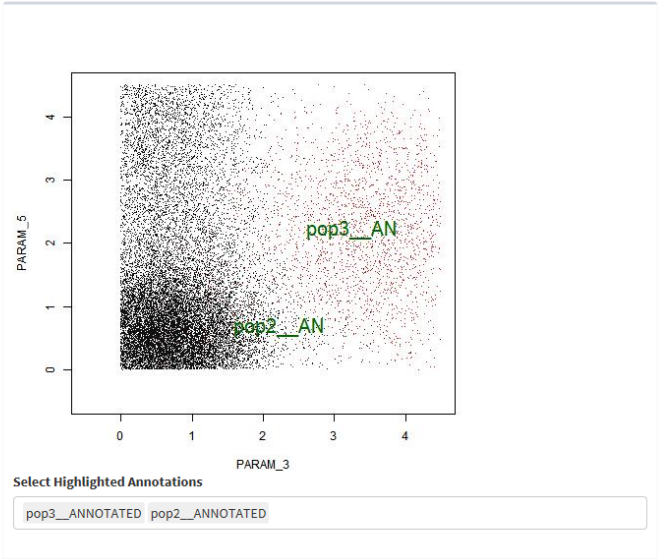
Select the markers to visualize



Plot



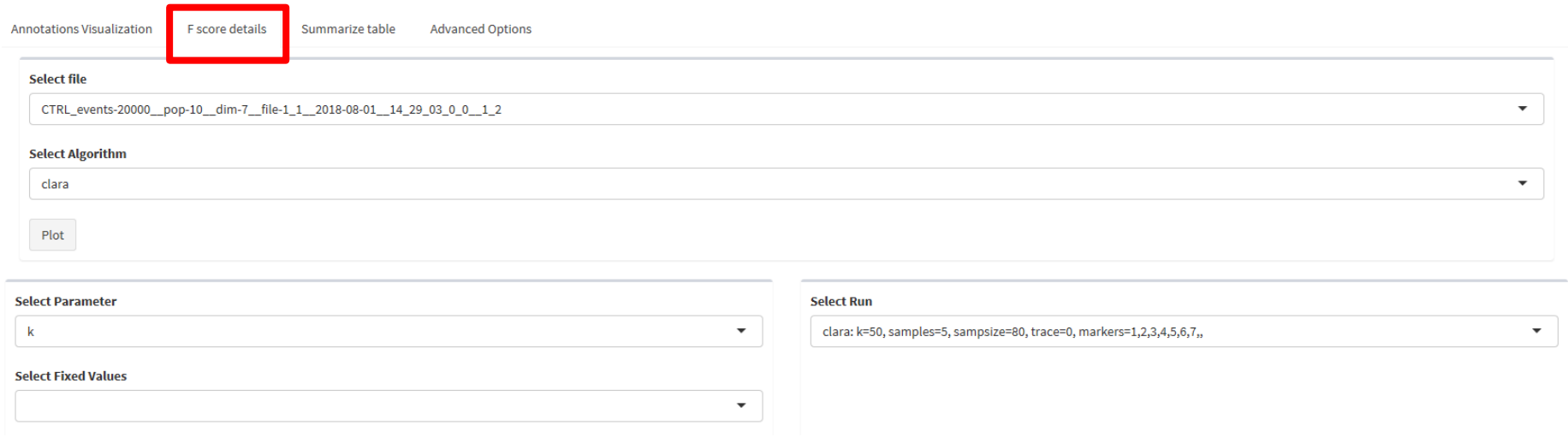
Selected Populations :
Markers expression

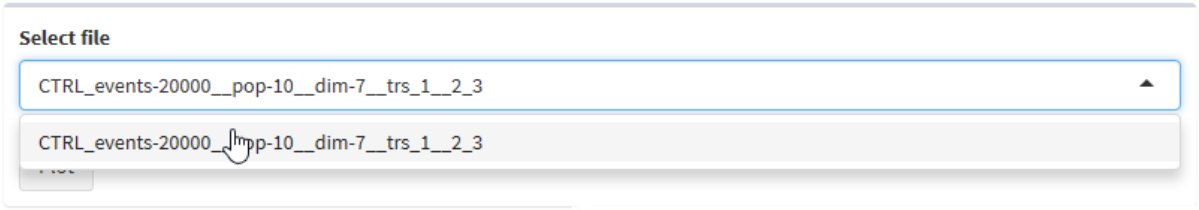


Selected Annotations :
Markers expression

Scoring Tab

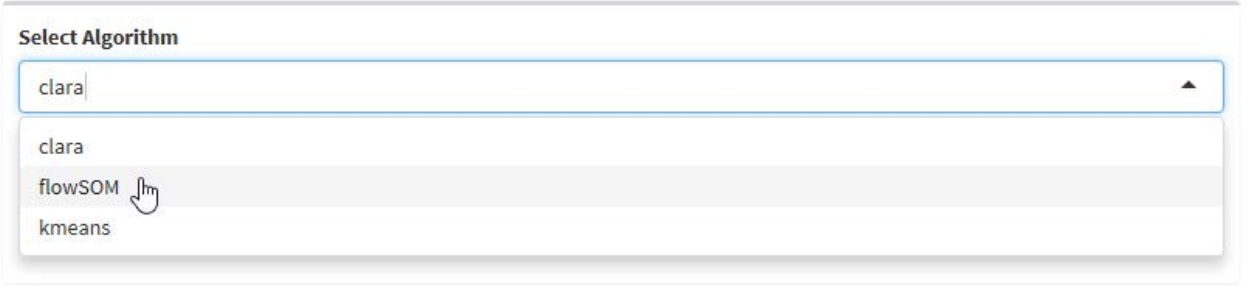
Visualization Panel : F-score variations





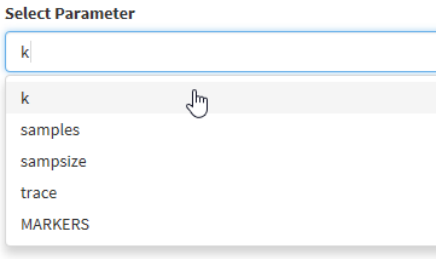
Select a file (only one in this case)

Select an algorithm among those used on the chosen file



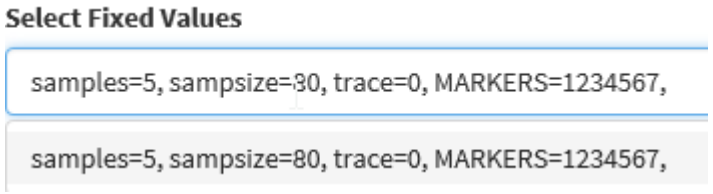
Scoring Tab

Visualization Panel : F-score variations



Select the variable parameter

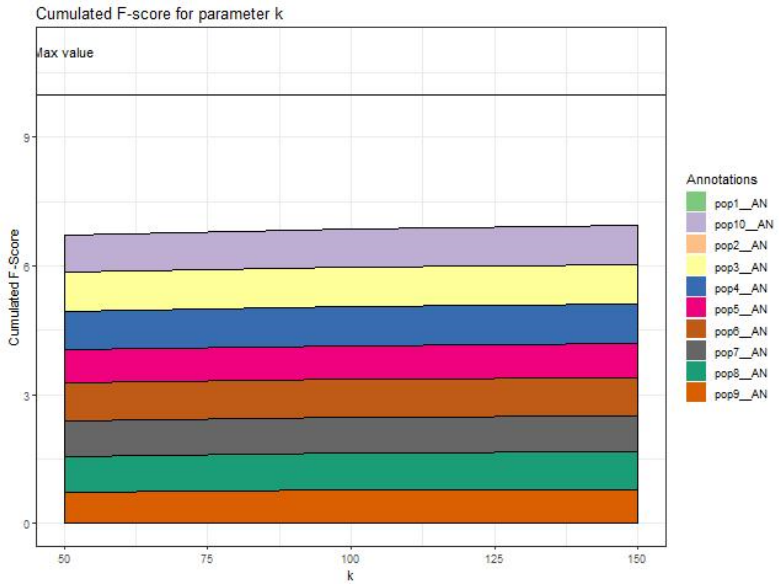
Plot



Select the values of the other parameters

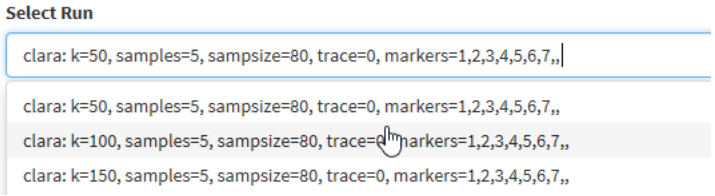
Evolution of the F-score of all populations:

- Depending on the values of the **variable parameter**
- Each population is identified by a color
- The maximum value of the cumulated F-score is the number of populations



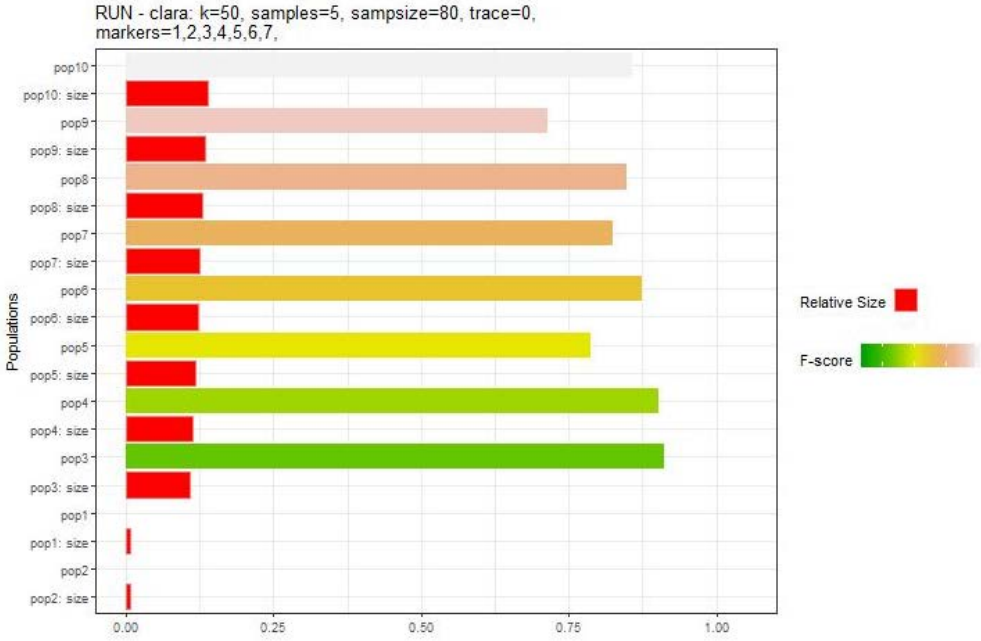
Scoring Tab

Visualization Panel : F-score variations



Select a set of parameters

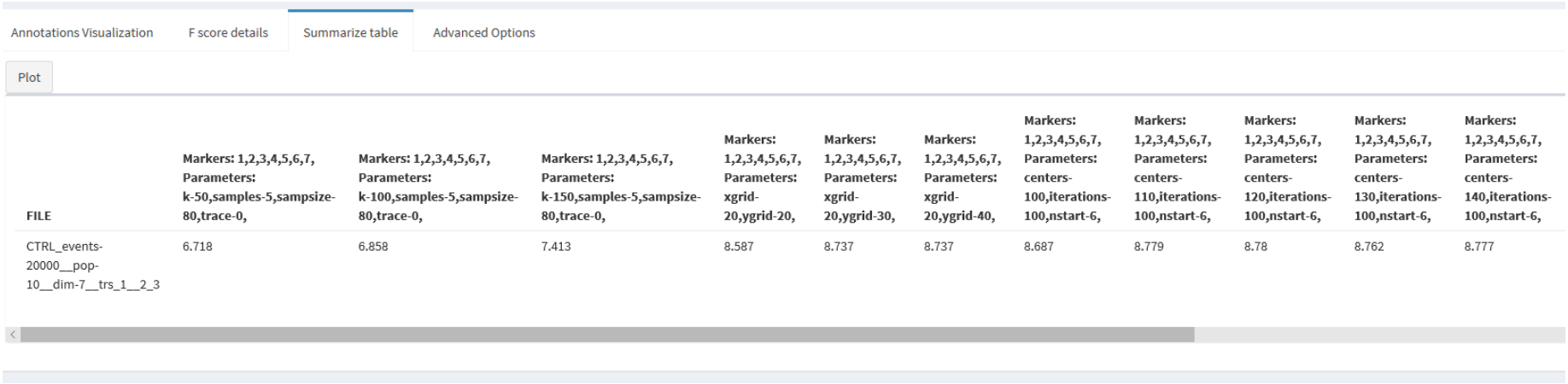
Plot



- F-Score of each population for the selected set of parameters
- The relative size gives the ratio $\frac{\text{size of population}}{\text{number of events in the file}}$

Scoring Tab

Visualization Panel : Summary table



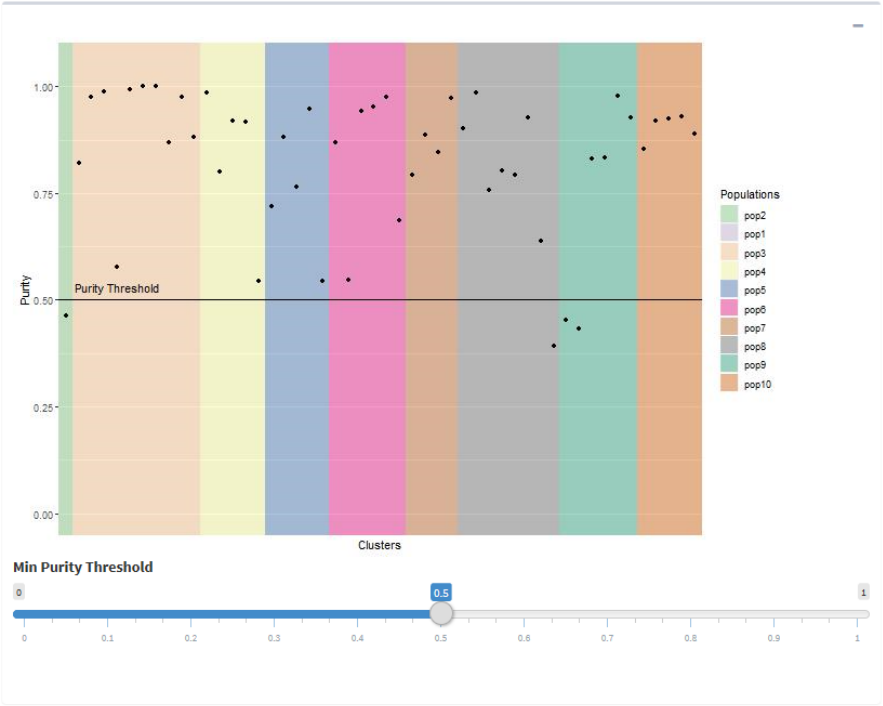
FILE	Markers: 1,2,3,4,5,6,7, Parameters: k-50,samples-5,sampsize-80,trace-0,	Markers: 1,2,3,4,5,6,7, Parameters: k-100,samples-5,sampsize-80,trace-0,	Markers: 1,2,3,4,5,6,7, Parameters: k-150,samples-5,sampsize-80,trace-0,	Markers: 1,2,3,4,5,6,7, Parameters: xgrid-20,ygrid-20,	Markers: 1,2,3,4,5,6,7, Parameters: xgrid-20,ygrid-30,	Markers: 1,2,3,4,5,6,7, Parameters: xgrid-20,ygrid-40,	Markers: 1,2,3,4,5,6,7, Parameters: centers-100,iterations-100,nstart-6,	Markers: 1,2,3,4,5,6,7, Parameters: centers-110,iterations-100,nstart-6,	Markers: 1,2,3,4,5,6,7, Parameters: centers-120,iterations-100,nstart-6,	Markers: 1,2,3,4,5,6,7, Parameters: centers-130,iterations-100,nstart-6,	Markers: 1,2,3,4,5,6,7, Parameters: centers-140,iterations-100,nstart-6,
CTRL_events-20000__pop-10__dim-7__trs_1__2_3	6.718	6.858	7.413	8.587	8.737	8.737	8.687	8.779	8.78	8.762	8.777

Summary Table:

Sum of the F-Score of all populations for every file, every algorithm with every set of parameters

Scoring Tab

Visualization Panel : Advanced Options



BELOW THRESHOLD	precision	Relative Size (population)	Relative Size (file)	Population
Cluster 1	0.4528	51.925 %	6.945 %	pop9
Cluster 7	0.4327	10.28 %	1.375 %	pop9
Cluster 43	0.4631	79.831 %	0.475 %	pop2
Cluster 46	0.3928	4.32 %	0.56 %	pop8

ABOVE THRESHOLD	precision	Relative Size (population)	Relative Size (file)	Population
Cluster 22	0.82	22.42 %	2.445 %	pop3
Cluster 28	0.9756	15.038 %	1.64 %	pop3
Cluster 36	0.9877	14.947 %	1.629 %	pop3
Cluster 37	0.5771	6.831 %	0.745 %	pop3
Cluster 38	0.993	6.556 %	0.715 %	pop3
Cluster 39	1	5.731 %	0.625 %	pop3
Cluster 40	1	26.501 %	2.89 %	pop3
Cluster 44	0.8695	1.054 %	0.115 %	pop3

- Purity of each cluster relative to their population.
- The clusters are grouped into populations
- The purity threshold sorts clusters in the two tables on the left