FCS Generator

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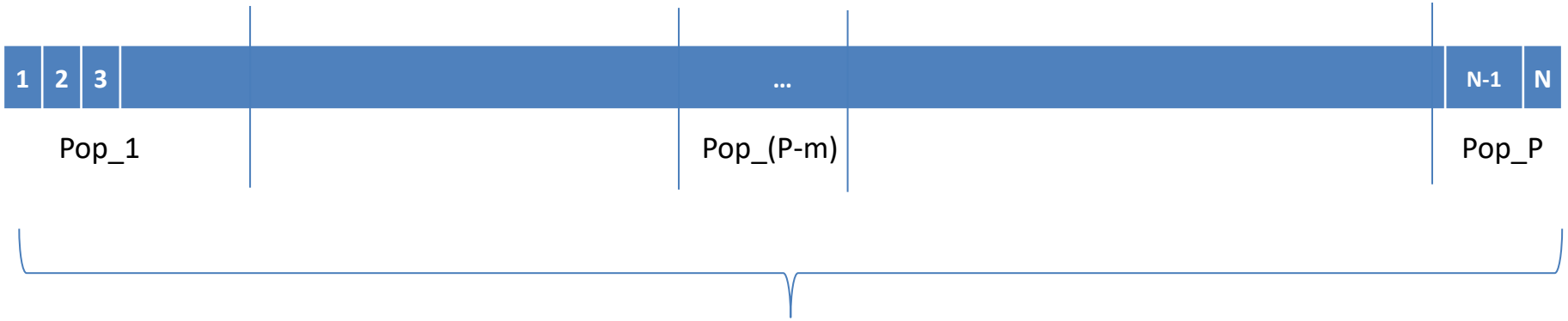
Generating Files

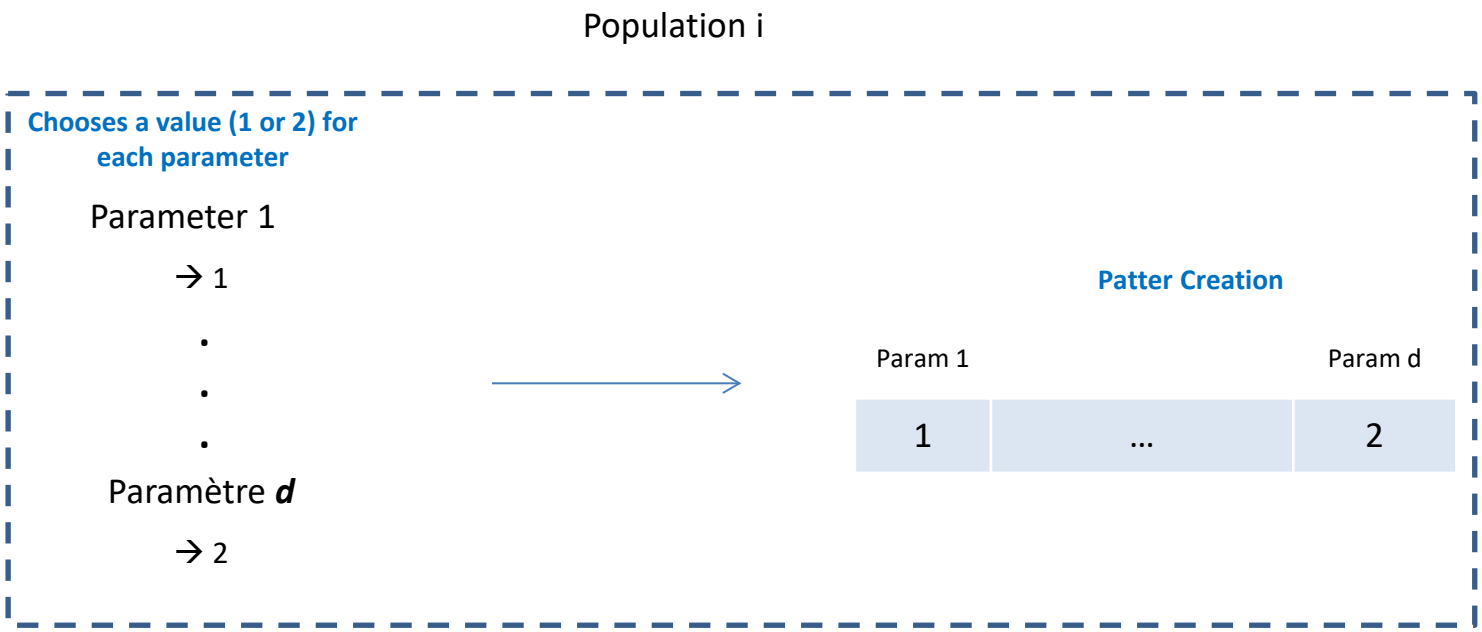
Generating a file containing ***N*** events and ***D*** parameters/markers,
with ***P*** populations, among which ***m*** are rare



Events Ids list cut in (***P-m***) lists with the same size and ***m*** shorter lists

Generating Files

Creations of *patterns* giving a unique ID to each population:



Unique pattern identifying population i ➔

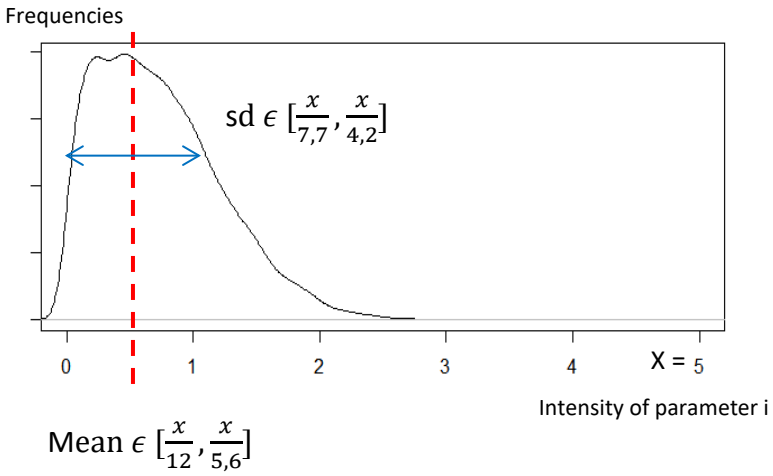
1	...	**2**

Generating Files

Patterns used to create **gaussians** determining the distribution of a population for each parameter

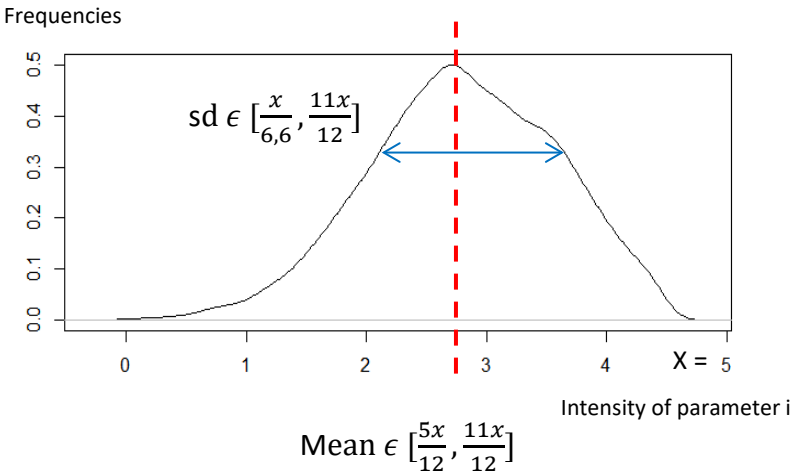
Param 1		Param k		Param ***d***
1	…	V_k	…	2

If V_k= 1



Mean ϵ $[\frac{x}{12}, \frac{x}{5,6}]$

If V_k = 2



Mean ϵ $[\frac{5x}{12}, \frac{11x}{12}]$

➔ L points extracted from the gaussian and attributed to the events of the population

With L = number of events in the population

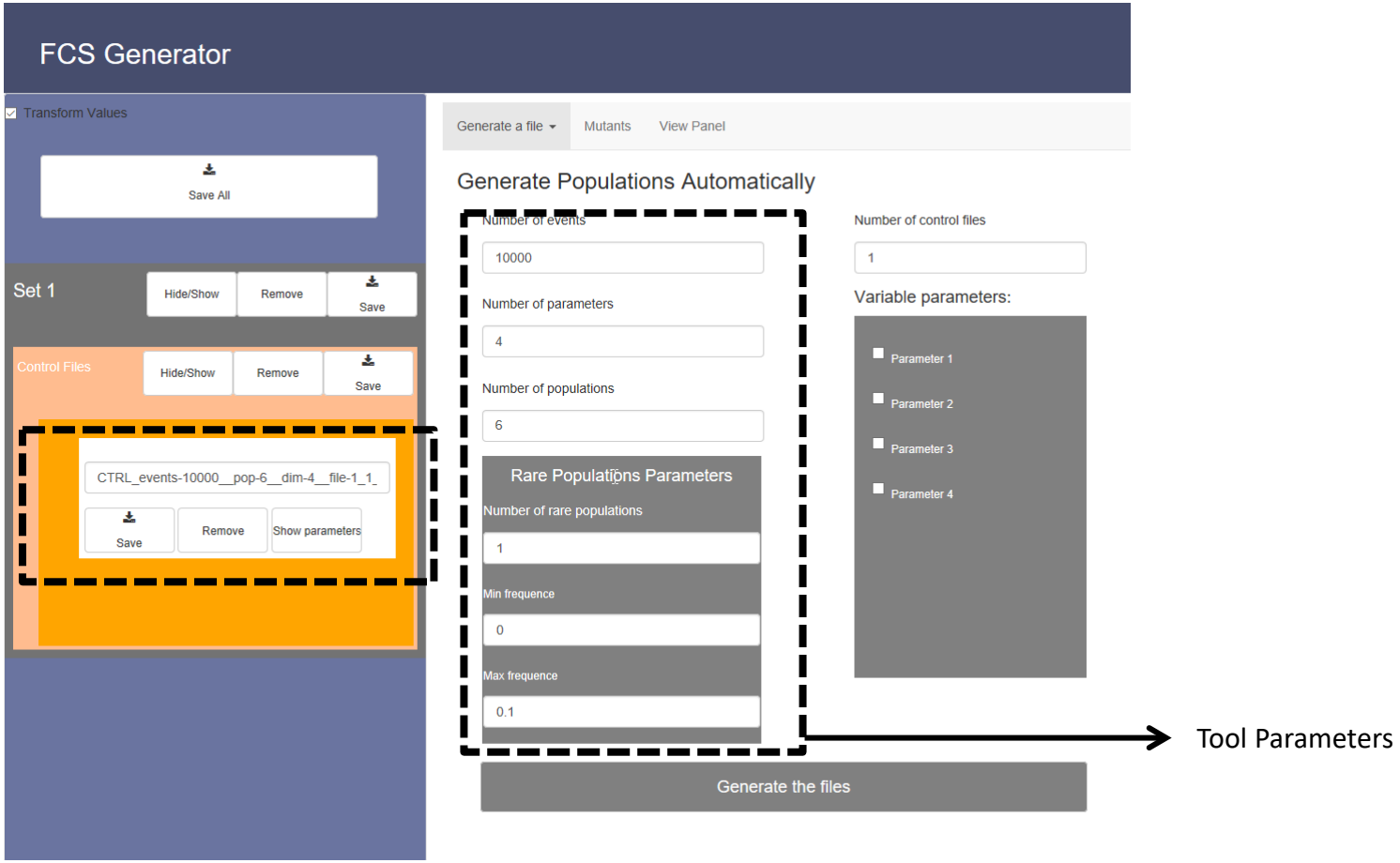
Generating Files

Matrix created and FCS file written

	Parameter 1	Parameter2	…	Parameter d	Population
Population 1	1,1				1
			. . .		
	1,8				1
Population 2	4,1				2
			. . .		
	3,7				2
Population ***P***					P
			. . .		
					p

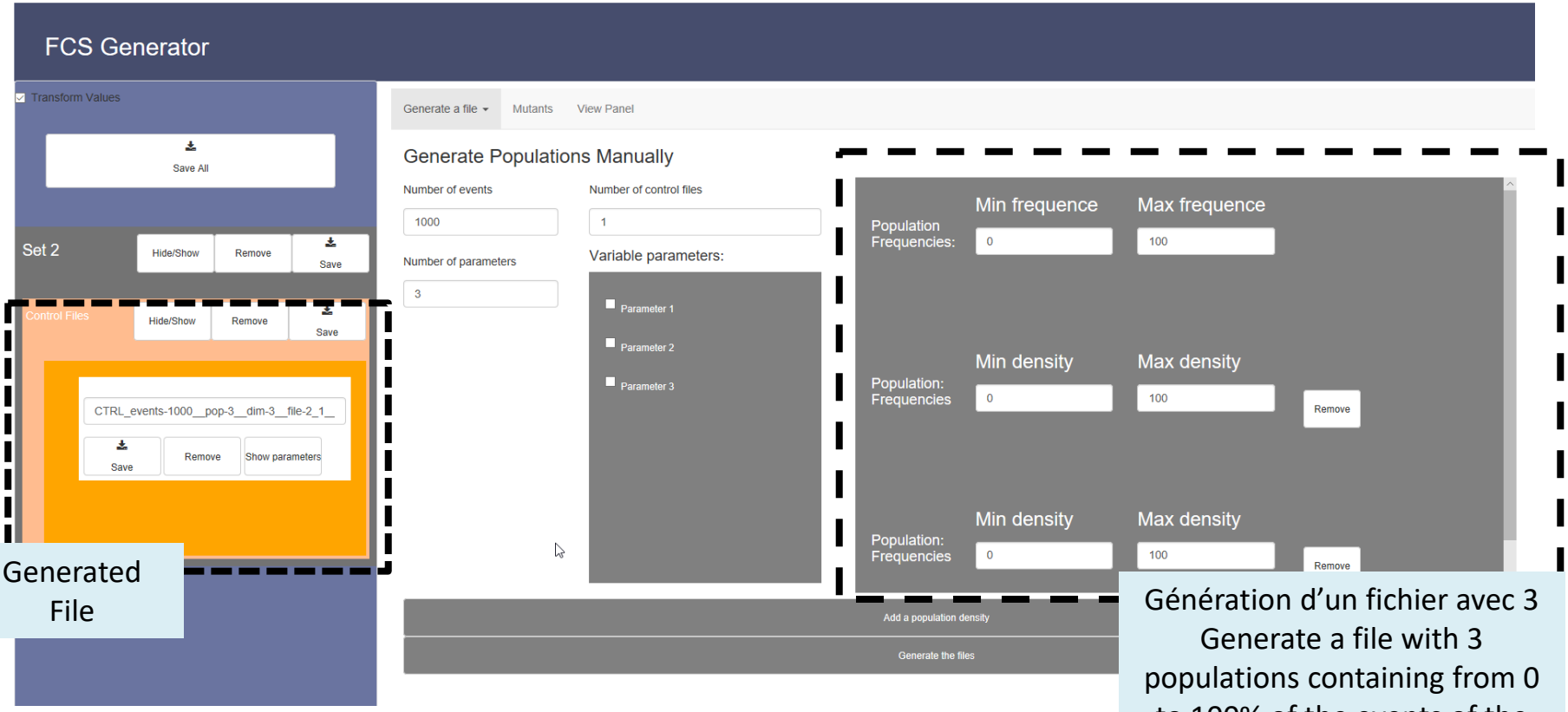
Generating Files

Generate Populations Automatically: number of populations as input



Generating Files

Generate Populations Manually: The user adds the populations (rare or regular) and chooses their frequencies

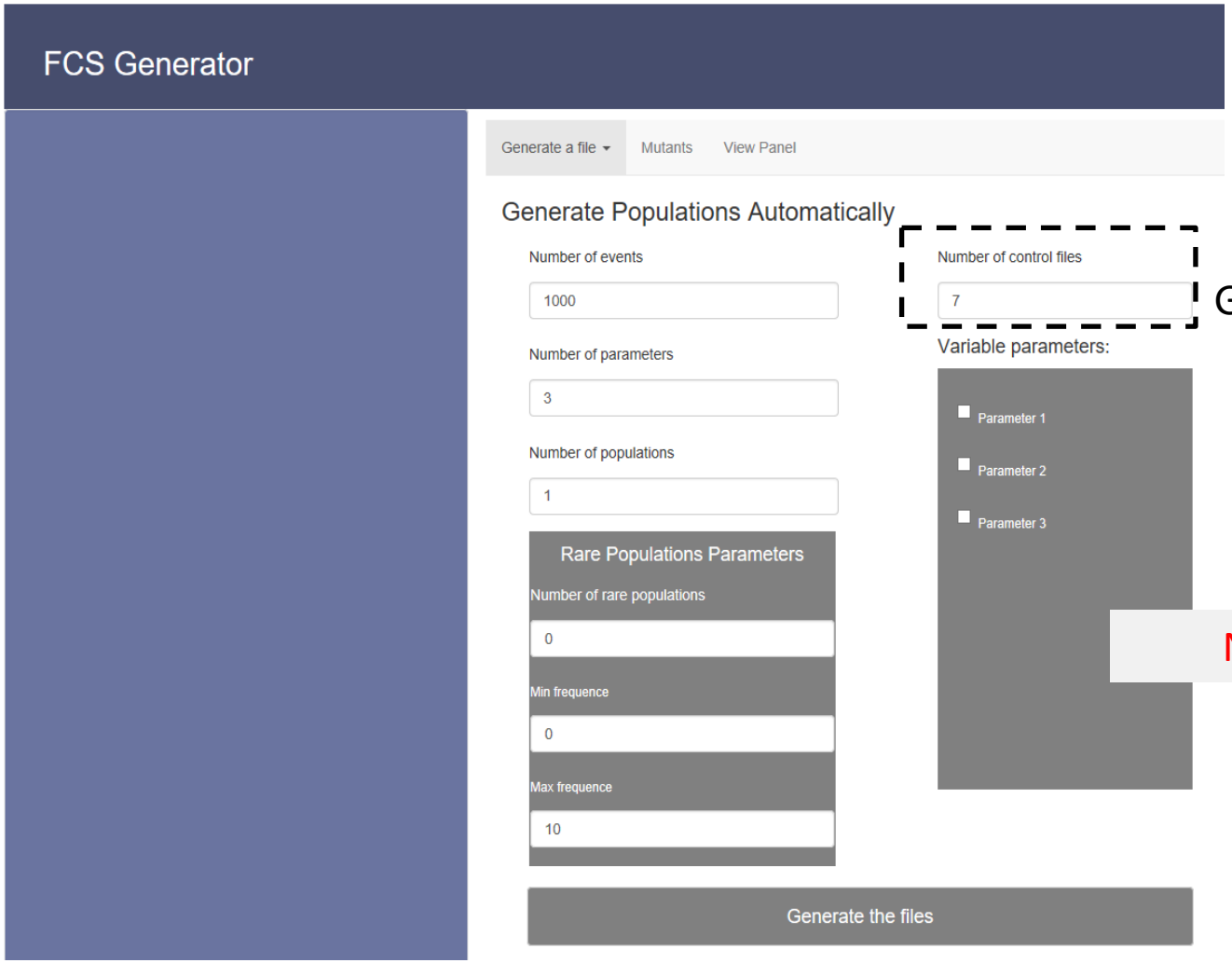


Generated File

Génération d'un fichier avec 3 Generate a file with 3 populations containing from 0 to 100% of the events of the file (reduced to 33% per file)

!!Conditions!!
Sum(min freq) <= 100
Sum(max freq) >= 100

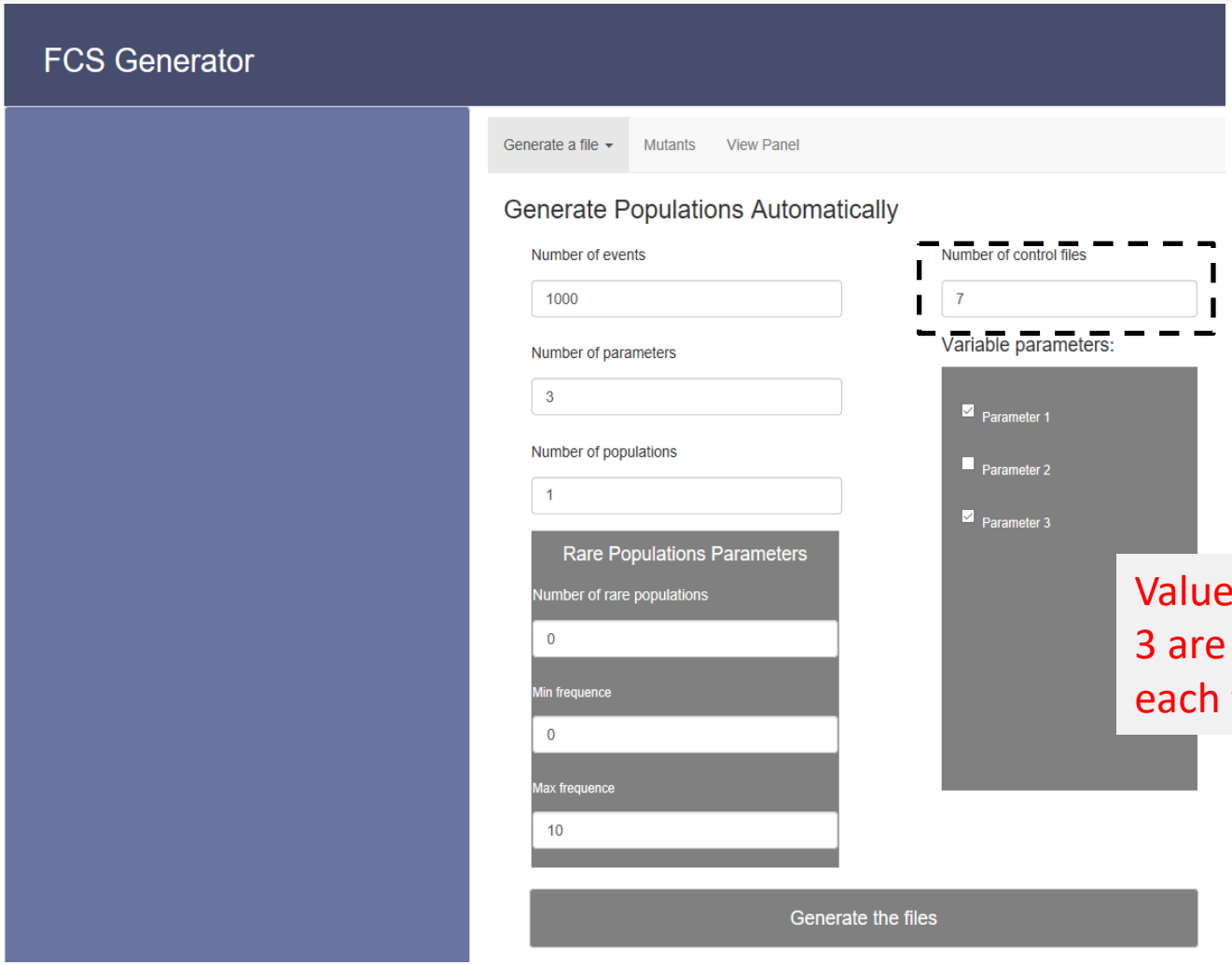
Generating Several Files



Generate 7 identical files

NO BOX CHECKED

Generating Several Files

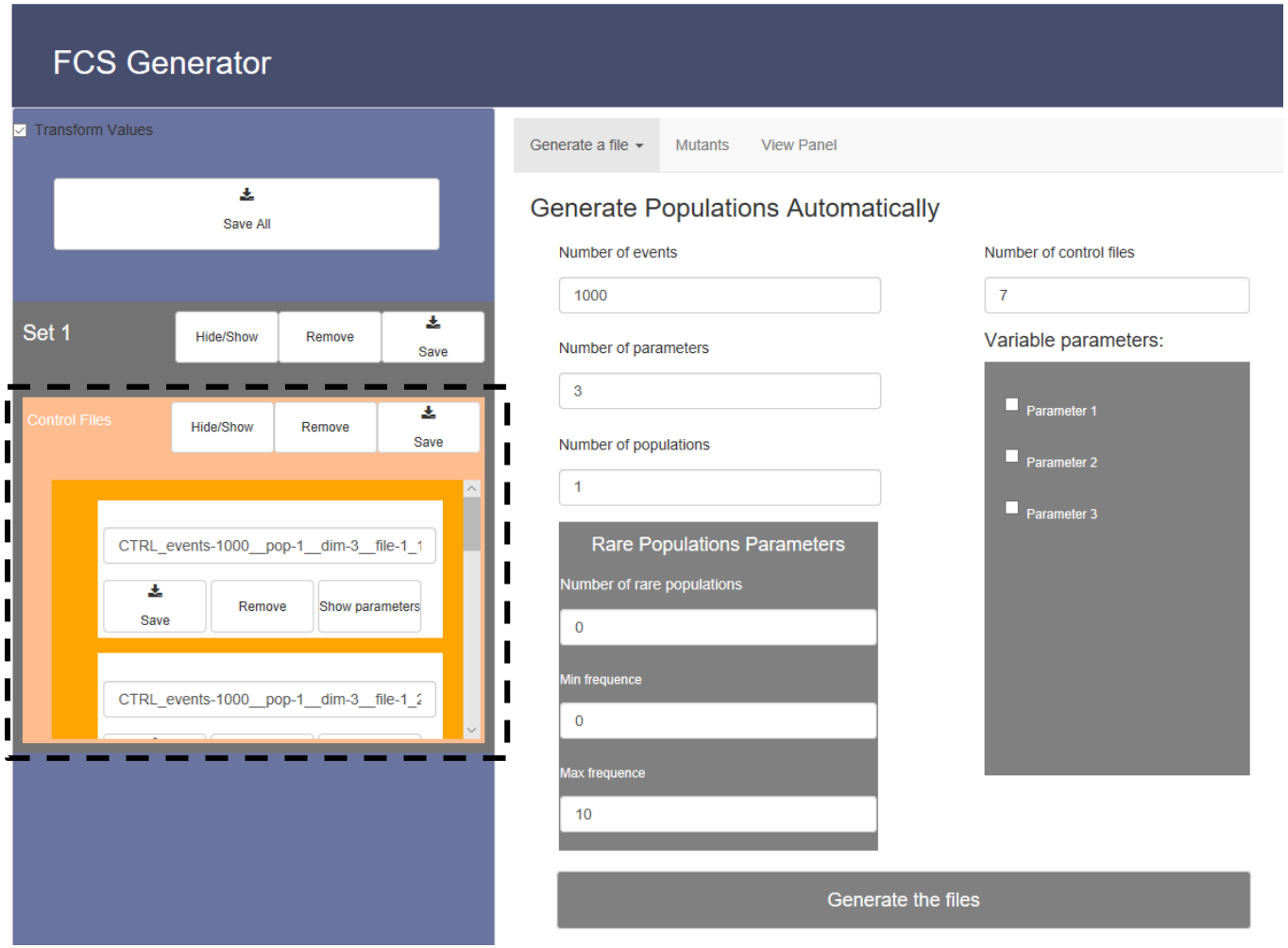


Generate 7 **similar** files

Values in parameters 1 and 3 are slightly different in each file (eg: 7 control files)

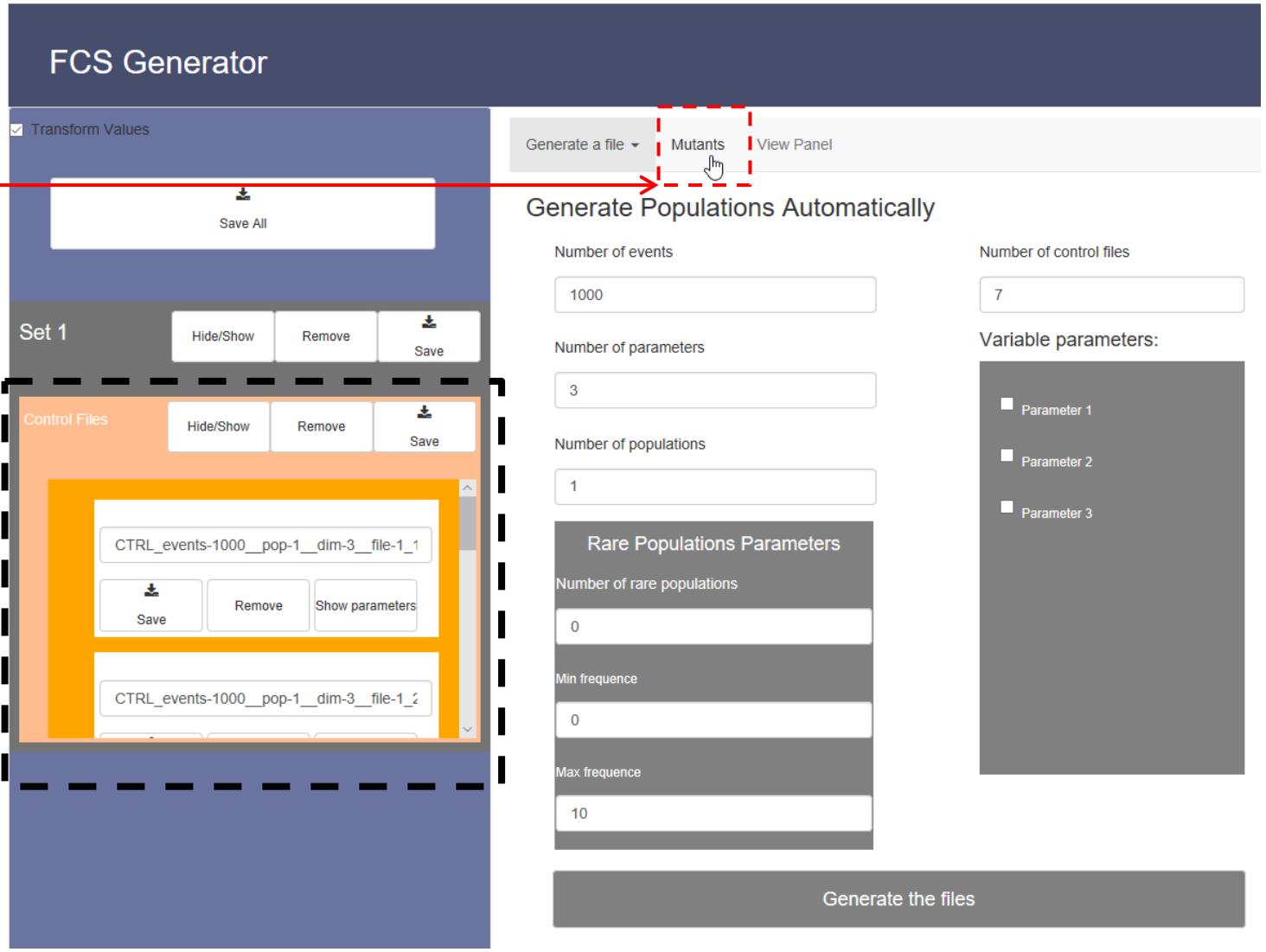
Generating Files

Generated Files
=
Control Files

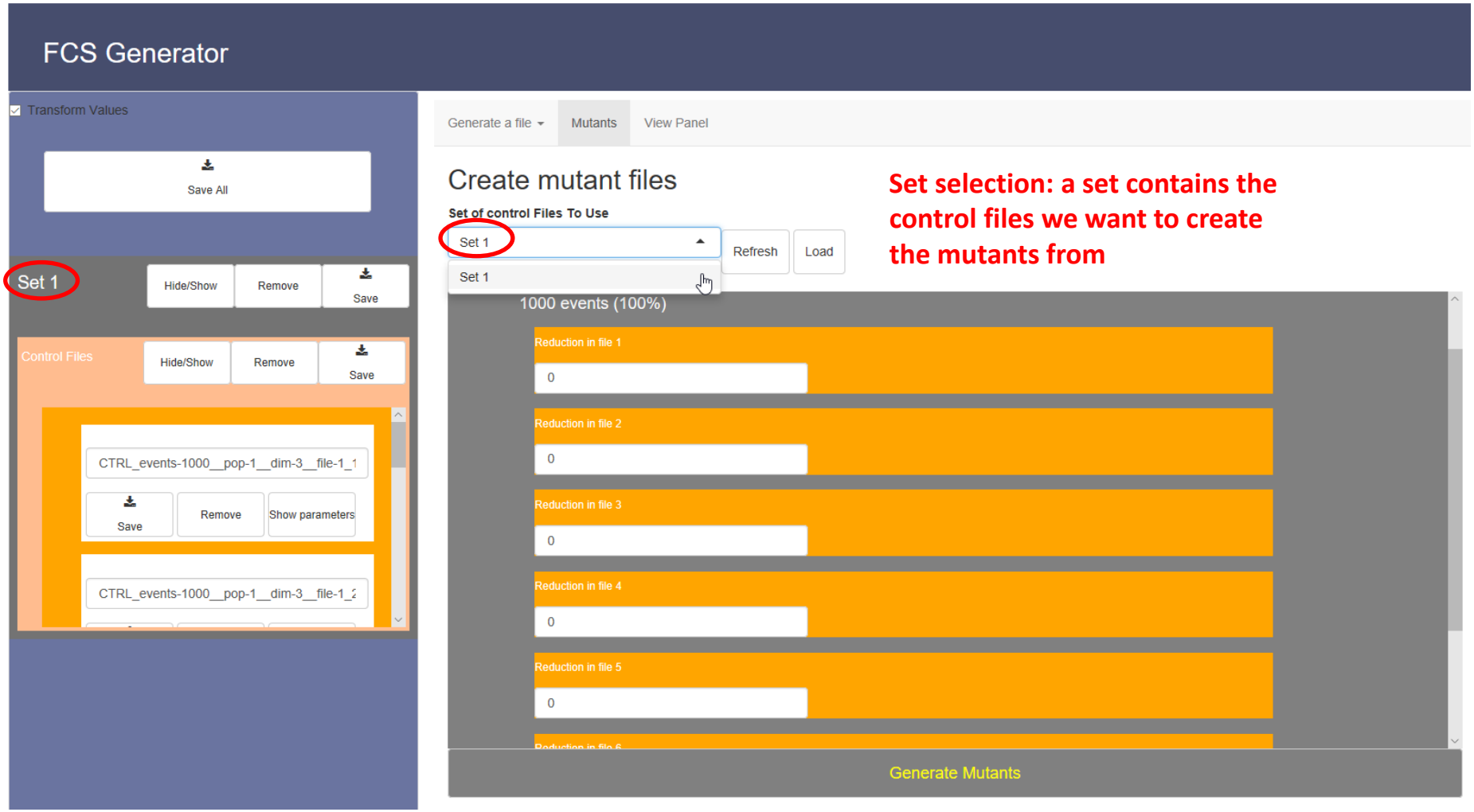


Generating Mutant Files

Mutants Generating Menu

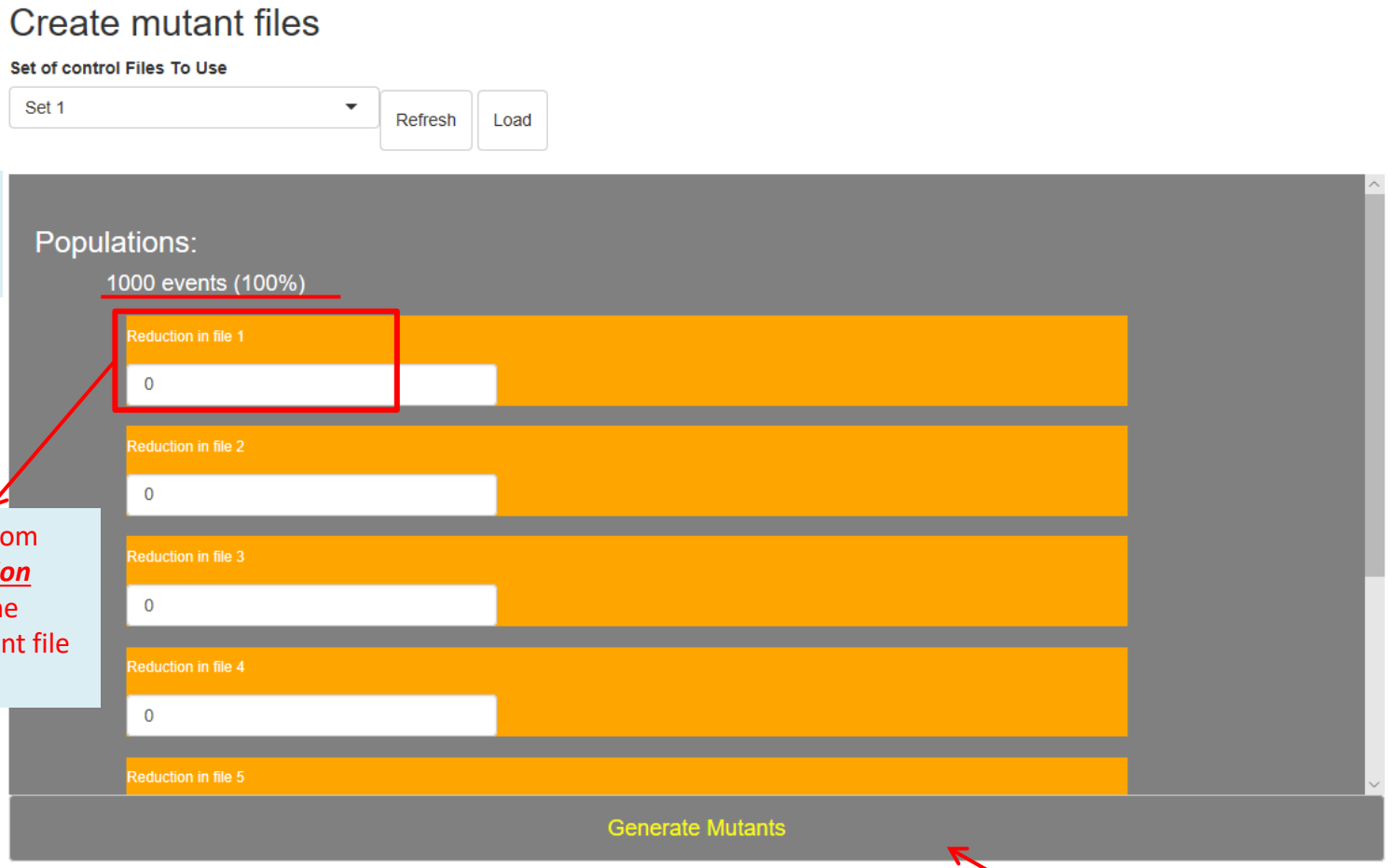


Generating Mutant Files



Set selection: a set contains the control files we want to create the mutants from

Generating Mutant Files



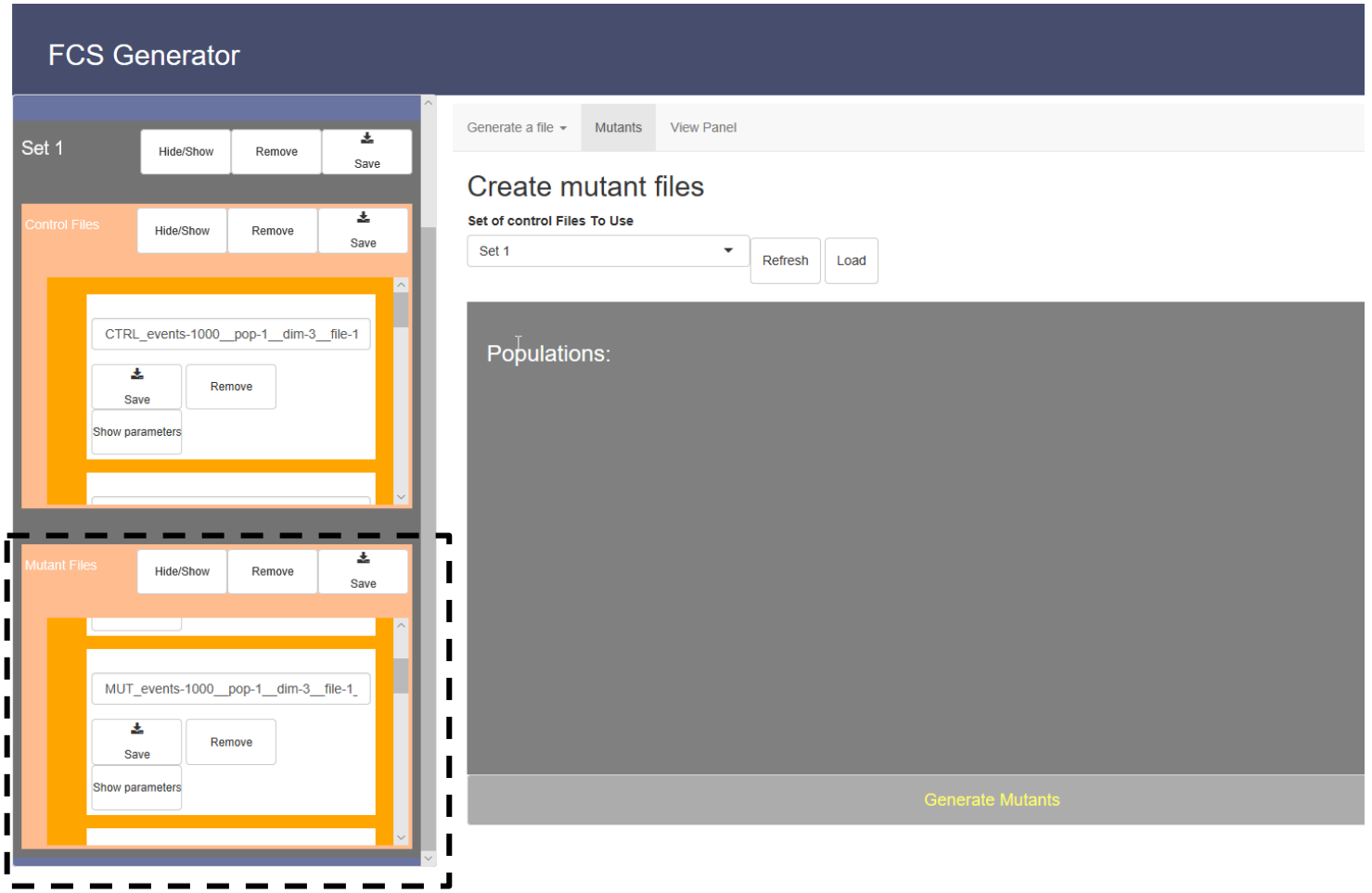
List of the populations contained in the control files

How many events (in %) from the ***considerered population*** should be distributed to the other populations of mutant file 1

Mutants Generating Button

Generating Mutant Files

Mutant files generated for the control files from Set 1



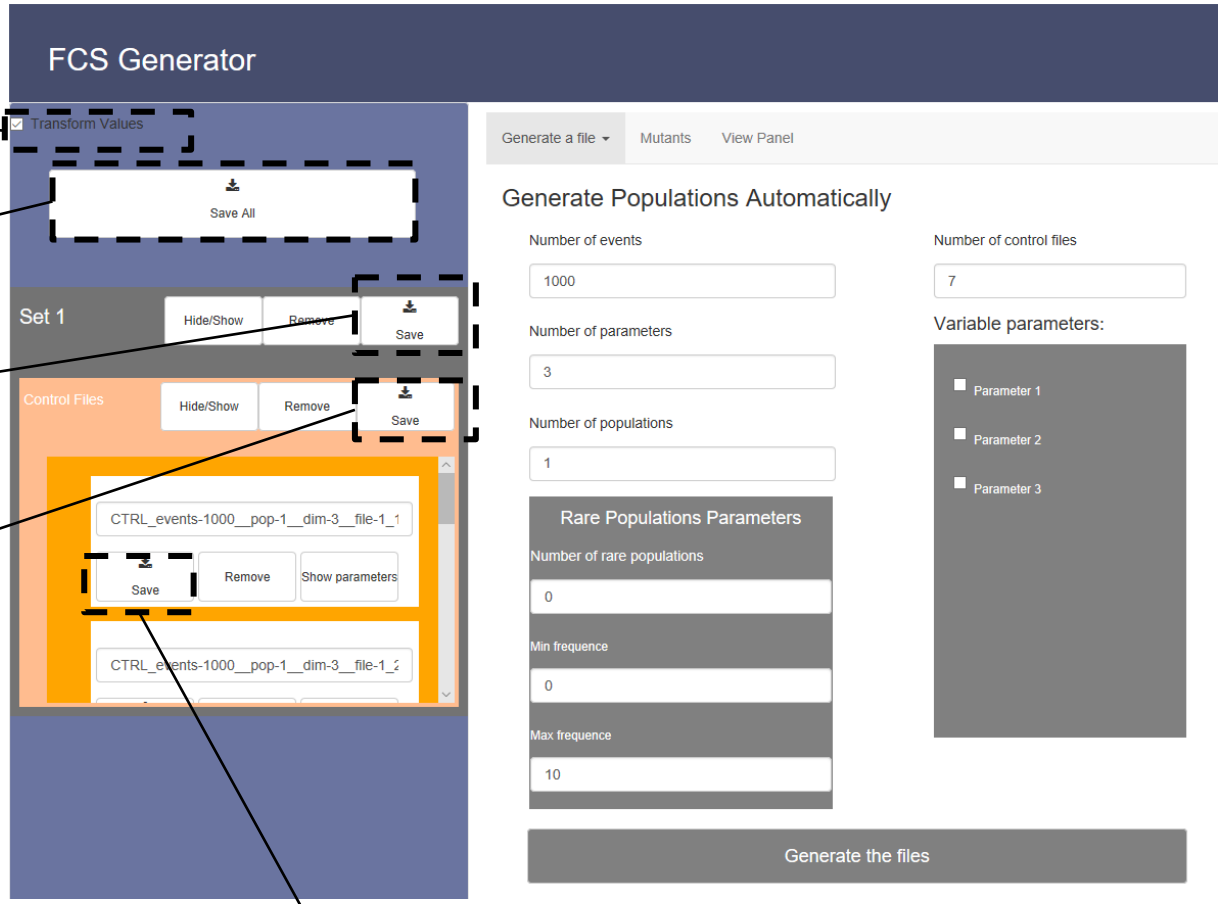
Downloading Files

Raw or Transformed Data (logicle transformation)

Download all files (zip)

Download Set 1 only (zip)

Download all control files from Set 1 (zip)



Download the chosen file only (FCS)