Below is a detailed description of each of the parameters that can be changed in the "*Change settings*" dialog box in GEDI. Note that the "*Advanced*" tab settings refer to technical terms related to SOM (*) and are not further explained here.

Parameter Name	Description
Grid Size	This is the dimension of the grid that gives rise to the mosaic, or GEDI map. Since it is based on SOMs, it is best to avoid square grids, i.e. for (a x b), a should not be not equal to b. Typically, a is close to b, e.g. 20 x 21. There is no absolute limit to these values although computational time will increase with larger mosaic grid sizes. *Typically one will set the grid size so that each tile contains on average about 10 genes.*
Train iterations	How many SOM iterations should you run? Typically 20 for first phase and 80 for the second phase. The more training the SOM receives, the smoother the mosaic tiles will fit each other and the tighter the mini-clusters will be. In general, the more iterations, the better the resulting graphic will be - at the cost of processing time.
Color Cutoff Limit	GEDI uses a universal color scheme to color all mosaics. The Color Cutoff Limit determines the extreme value at which the coloring scheme becomes saturated. Specifically, the Color Cutoff Limit is *the number of standard deviations away from the mean value of all of the tiles (in all mosaics) at which the colors become saturated*. For example, if the Color Cutoff Limit was set to 2 and a particular mosaic tile has a centroid value 2.4 which is 3 standard deviations from the mean of the data, it would be the same color as all of the other elements 2 or more standard deviations away from the mean.
Input/output directory	The default directory that GEDI will use to open or save files.
Neighborhood Radius	The Neighborhood parameter may be used to control how neighbors of the "winning node" in the SOM training process are trained (adjusted). The neighborhood function used is a "sombrero" or "Mexican-hat" version of that described by Kohonen (*).
Learning factor	Learning factor controls how much of a calculated weight adjustment is actually applied.
Neighborhood Block	The Neighborhood Block parameter defines the size of a hypercube about the winning node. Nodes which fall outside of this hypercube will not be trained, regardless of the neighborhood coefficient that might be calculated for them. *The value of Neighborhood Block should be an even integer.*
Conscience	The Conscience parameter is used to reduce the possibility of the same node winning too often. It acts to increase or decrease the likelihood that a particular node will emerge as the winner for the current input pattern.
Neighborhood Clip	Coefficients with a value less than the Neighborhood Clip parameter are not applied, so, the input weights for that node are not modified.
Random seed	Random seed is used to generate a new set of random number in the initialization of the SOM training, which affects, for example, the sequence of genes being picked for the SOM training.

*Kohonen T. (1997). Self-organizing maps, Springer Verlag, Berlin Germany