

## Create Spreadsheet for Segmentation

**Author:** Greta Linse, Golden Helix, Inc.

### Overview

Based on a column from a spreadsheet, this script creates a new spreadsheet with a pseudo marker map and generic column headers making it suitable for running CNAM optimal segmenting.

### Examples

- A. Determining the boundaries between copy number loss, neutral, and gain.
- B. Determining the “elbow” on a scree plot of eigenvalues.

### Recommended Directory Location

Save the script to the following directory:

**\*..\Application Data\Golden Helix SVS\UserScripts\Spreadsheet\Scripts\**

**Note:** The **Application Data** folder is a hidden folder on Windows operating systems and its location varies between XP and Vista. The easiest way to locate this directory on your computer is to open SVS and select **Tools >Open Folder > UserScripts Folder**. If saved to the proper folder, this script will be accessible from the spreadsheet **Scripts** menu.

### Using the Script

1. Open a spreadsheet containing the column you want to run CNAM optimal segmenting on. In the example below, this is column 4 (Segment Mean) whereby CNAM optimal segmenting will help determine the boundaries between copy number loss, neutral, and gain.

Map	Samples	Chromosome Name	Base Start Position	Base End Position	Segment Mean	# Markers	Start Index	End Index
1	NA06994	22	21110596	21552208	-1.0812	26	483392	483417
2	NA10846	22	21024382	21552208	-1.06232	37	483381	483417
3	NA18523	22	20899035	21552208	-0.956866	49	483369	483417
4	NA19154	22	21059134	21552208	-0.945788	30	483388	483417
5	NA18972	22	21051700	21552208	-0.938668	33	483385	483417
6	NA07357	22	21089094	21552208	-0.924919	27	483391	483417
7	NA18526	22	21051700	21585556	-0.879205	35	483385	483419
8	NA12005	22	21282239	21552208	-0.858552	10	483408	483417
9	NA10831	22	21282239	21552208	-0.780516	10	483408	483417
10	NA18998	22	21024382	21552208	-0.734256	37	483381	483417

2. Select **Scripts > Create Spreadsheet for Segmentation**.
3. Indicate the column number you want indexed and click **OK** (below).

The result is a new marker mapped spreadsheet with one row representing the transposed version of the column you chose to index. You can now run CNAM optimal segmenting on this spreadsheet.

Map	Columns	1	2	3	4
1	Segment Mean	-1.08120393753052	-1.06231963634491	-0.956866323947906	-0.945788264274597