

“How To Sunburst”

Introduction

Sunburst plots are a graph type used for visualizing population hierarchies in a radial design around a central hub (“root population”). The graphic has been implemented as a plugin for FlowJo and SeqGeq - It opens in a browser using a Shiny App architecture, allowing for interactive options in order to change color palettes and formatting options. The mouse over annotation displays information about the population counts. Clicking on a population focuses in on that population and its children. This powerful graphic offers another great way for researchers to represent their data.

Setting up the Sunburst Plugin

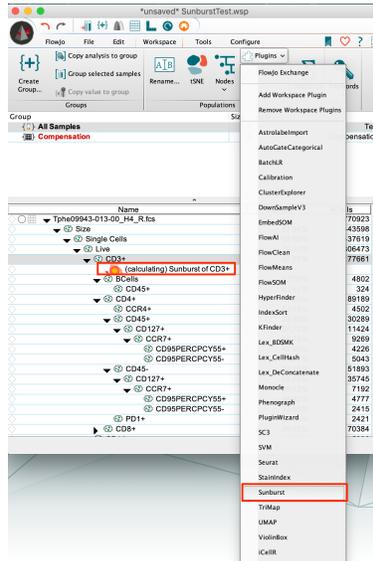
There are detailed instructions on how to set up plugins in our [online documentation](#).

The Sunburst plugin can be set up with the following steps:

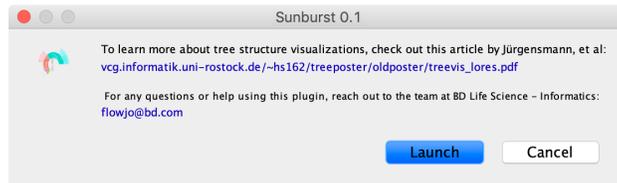
1. Place the Sunburst JAR file into a “plugins” folder.
2. Ensure that the [R program] (<https://cran.r-project.org/>) is installed on the computer.
3. Go to the Preferences (heart) icon in FlowJo or SeqGeq and select Diagnostics.
4. Select the plugins folder.
5. Set the correct R path in the R Path field.
6. Restart the application.

Using the Sunburst plugin

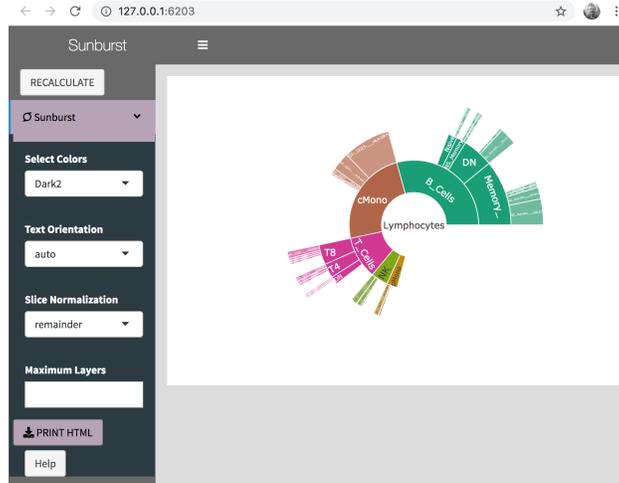
The Sunburst plugin should be used after fully gating populations of interest in the workspace. Select a parent population with subpopulations of interest. The selected population will become the root population and its subpopulations will make up the layers of the sunburst plot. Go to the workspace tab, select the plugins dropdown, and choose Sunburst from the dropdown.



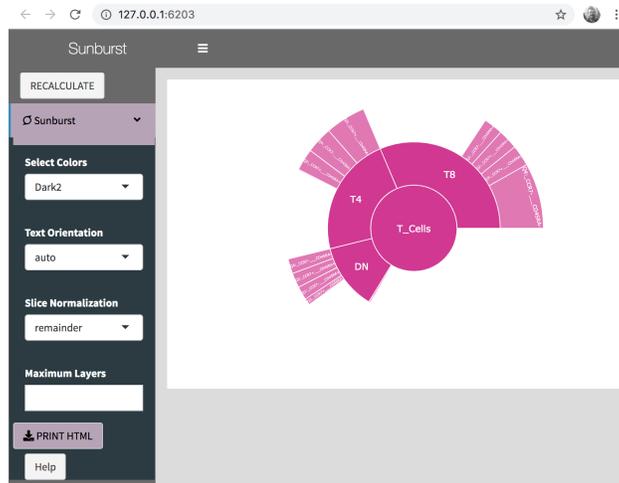
A window will appear prompting researchers to launch the interactive sunburst graphic. Pressing “Launch” will open a browser window for formatting and exporting the Sunburst plot.



In the web browser window, press “Recalculate” to generate the sunburst plot using the default settings. From the sunburst menu, the colors of the plot can be changed, as well as the text orientation, normalization type, and the number of layers displayed. Click the photo icon in the top right corner of the plot to save the image as an image file. Click the “Print HTML” button to save the interactive graphic as an html package to reopen later and send to others. *Note:* Saving as the HTML requires the pandoc package which can be downloaded from the link provided in the help button. pandoc.org



Mouse over the different sections of the plot to view population counts. Click on those segments to zoom into those populations and set them as the new center of the plot.



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