

Successfully importing CytoFLEX CytExpert software data into third party software programs

The acquisition and analysis software package for the CytoFLEX* research cytometer, CytExpert uses intuitive workflow and novel tools to facilitate complex multicolor flow cytometric applications. CytExpert software offers a wide variety of flexible analysis templates and plotting tools for easy and efficient data analysis and is available to anyone analyzing data from a CytoFLEX without licensing fees.

Intuitive GUI for novice and flow experts

- Experiment-based workspace design
- Linear detector gain control
- Gain-independent real-time compensation
- Unique Compensation Library

Collecting data on the CytoFLEX research flow cytometer using CytExpert software creates FCS 3.0 files. Importing this data into other third-party cytometry analysis software requires setting the preferences of that software to recapitulate the presentation as seen in CytExpert.

This guide provides a brief overview of the steps involved to account for differences seen in some third party analysis software when importing data from CytExpert.

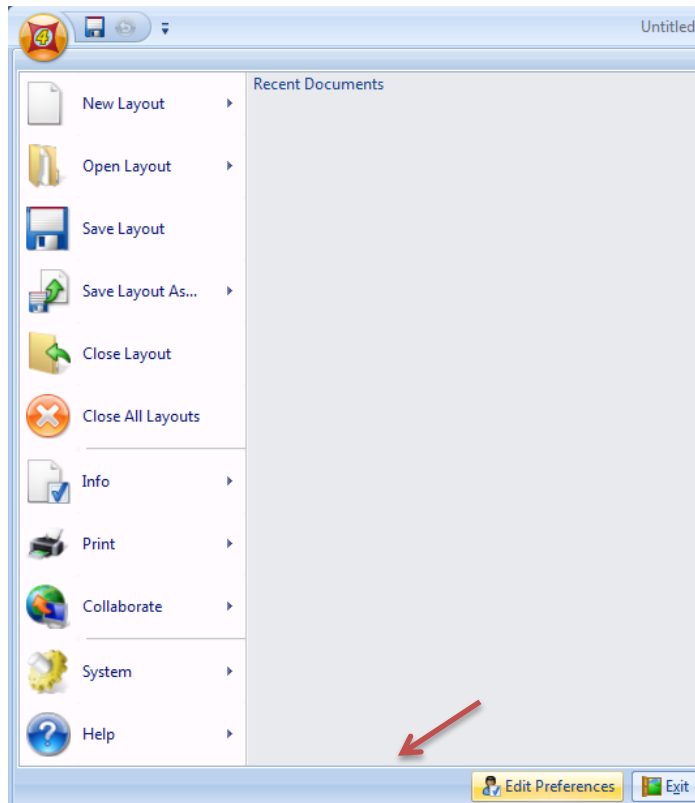
FSC Express Software v4.0

Scaling and Display Preferences

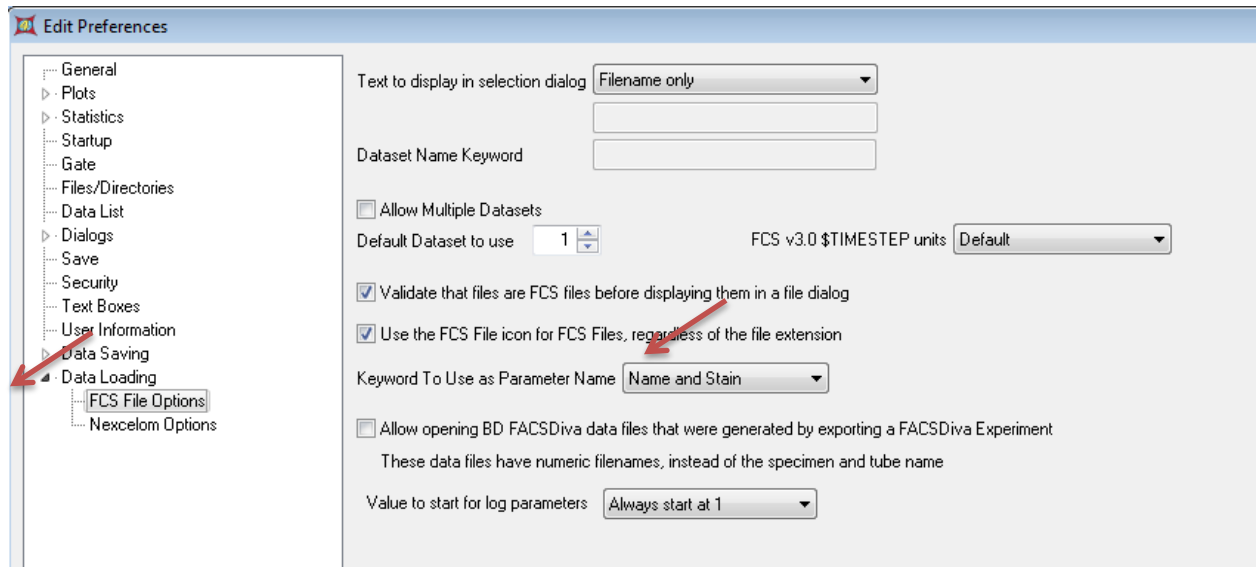
Here we describe how to locate the parameter names in the FCS header and adjust scaling in FCS Express software when importing data from your CytExpert software.

Displaying parameter names:

1. In FCS Express, go to FCS Express icon, select “Edit Preferences”



2. In “Edit Preferences” window, select “Data Loading”, then select “FCS File Options”.

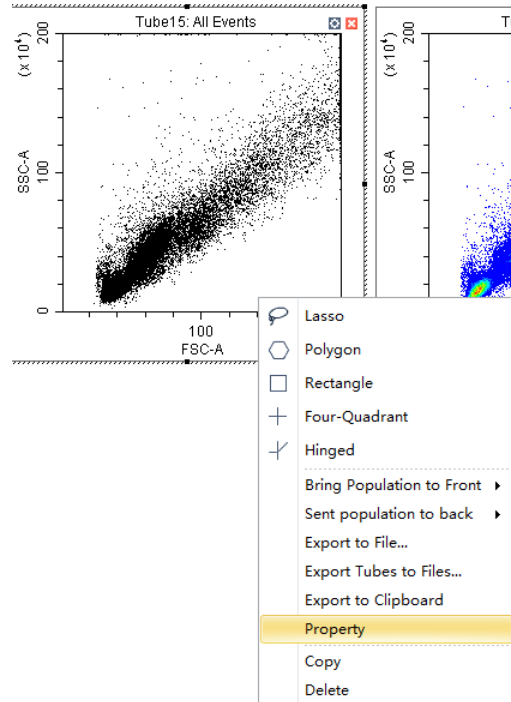


3. On the right side of the window, select “Name and Stain” for Keyword to Use as Parameter Name.
4. Close FCS Express.
5. Restart FCS Express.

Adjusting scatter scaling in FCS Express v4.0

When viewing data In CytExpert Software:

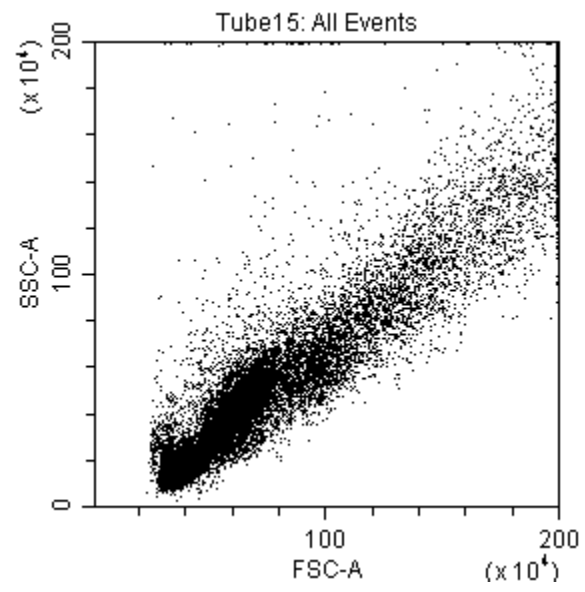
1. Right click on the plot, select Property



2. Enter minimum (10000) and maximum (2000000) values for FSC and SSC. Alternatively, capture the minimum and maximum values and enter in FCS Express.

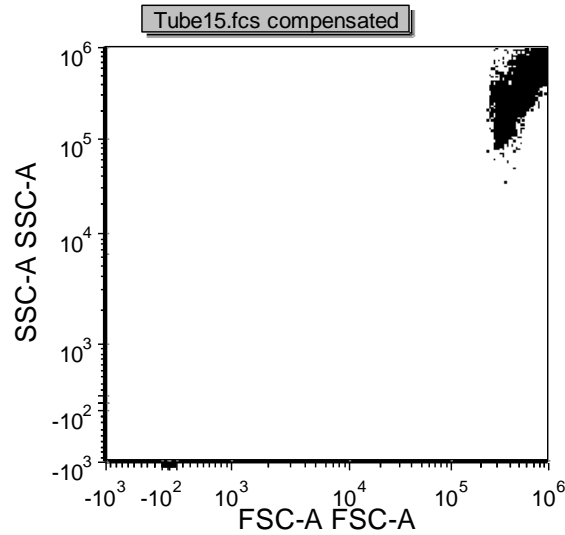
3. Select "Close"

4. The plot appears as below.



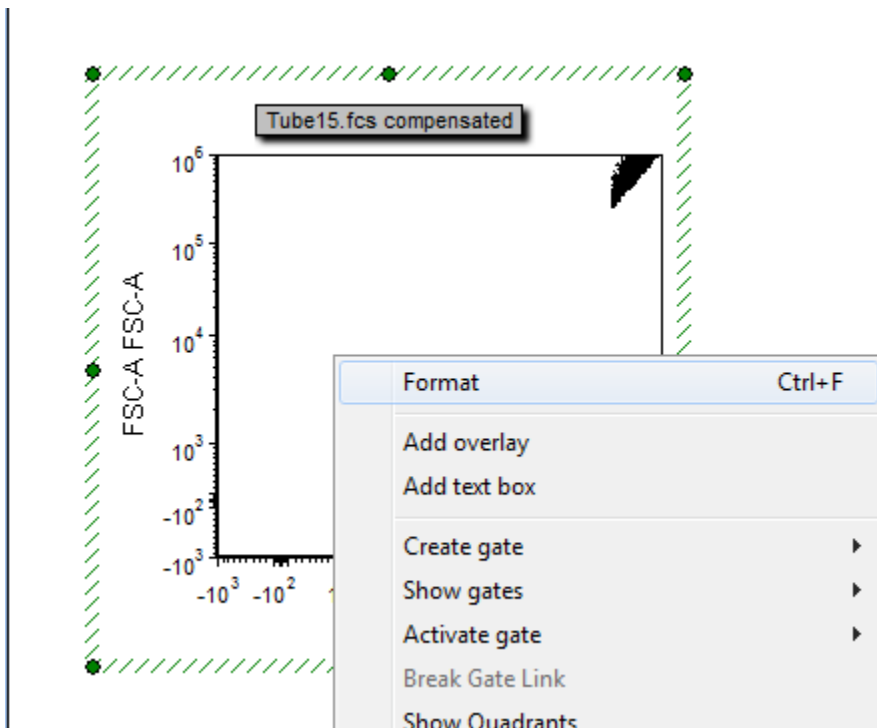
Transferring data files from CytExpert to FCS Express v4.0:

When you import data from CytExpert software into FCS Express v4.0 the data will look like this:

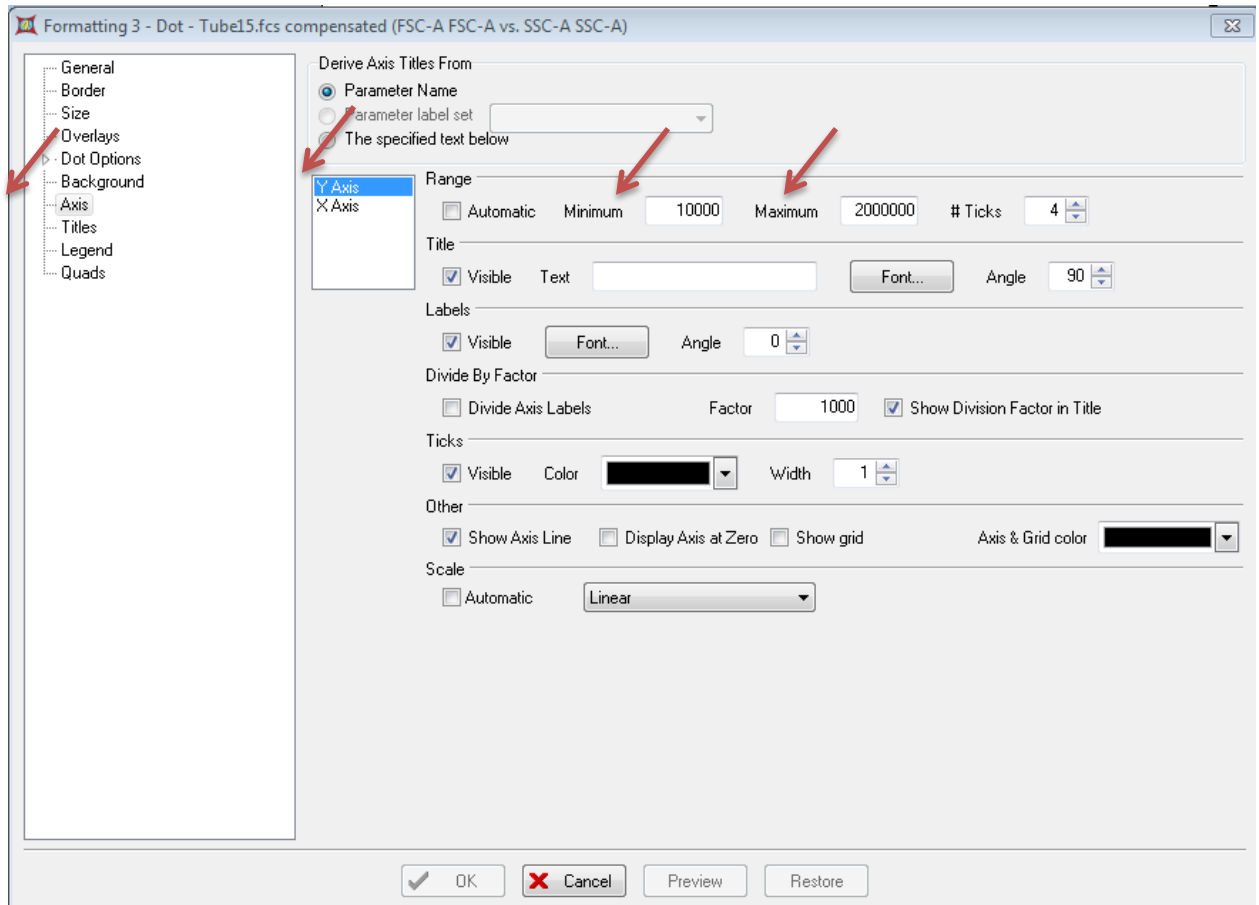


The following steps will allow you to correct this view in FCS Express software v4.0:

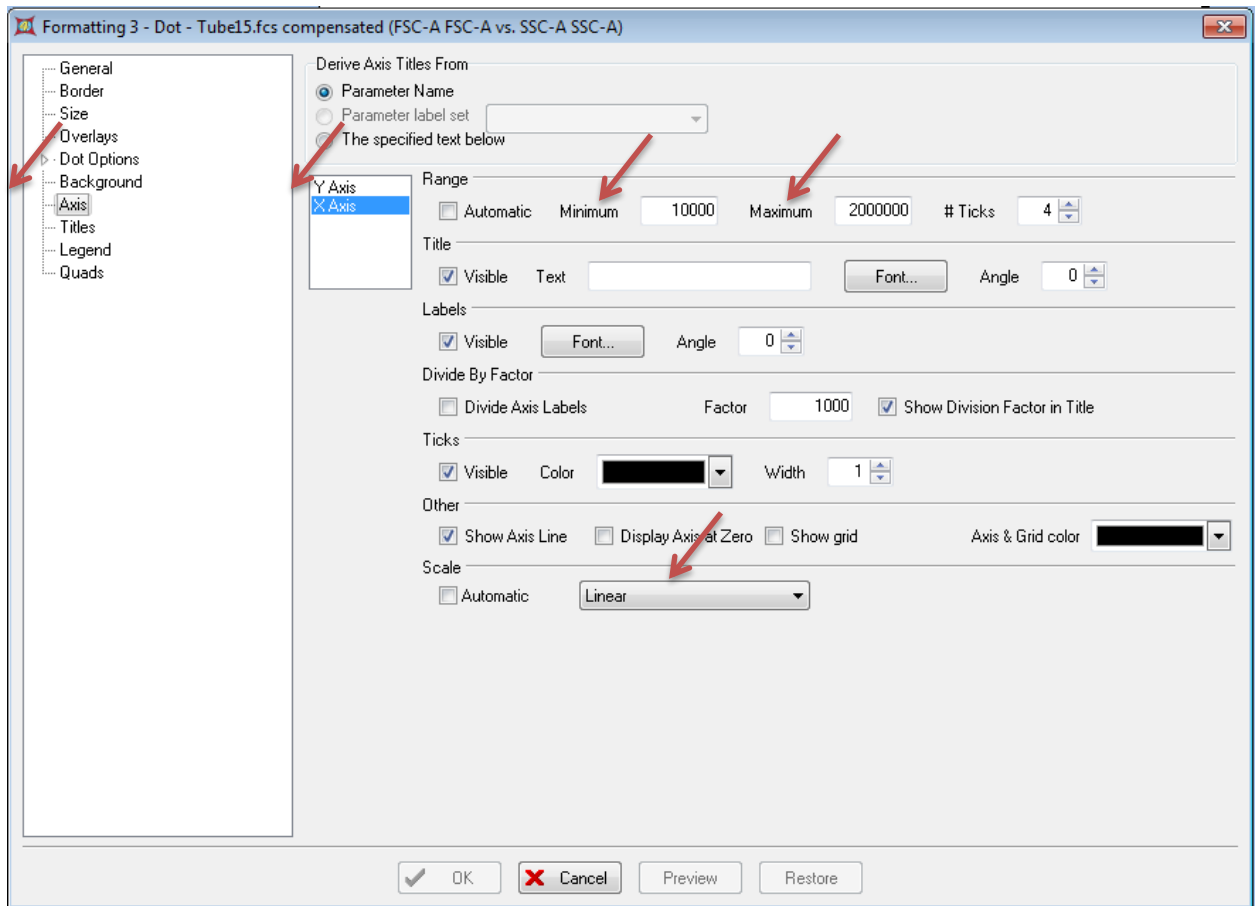
1. Right click on the plot and select "format"



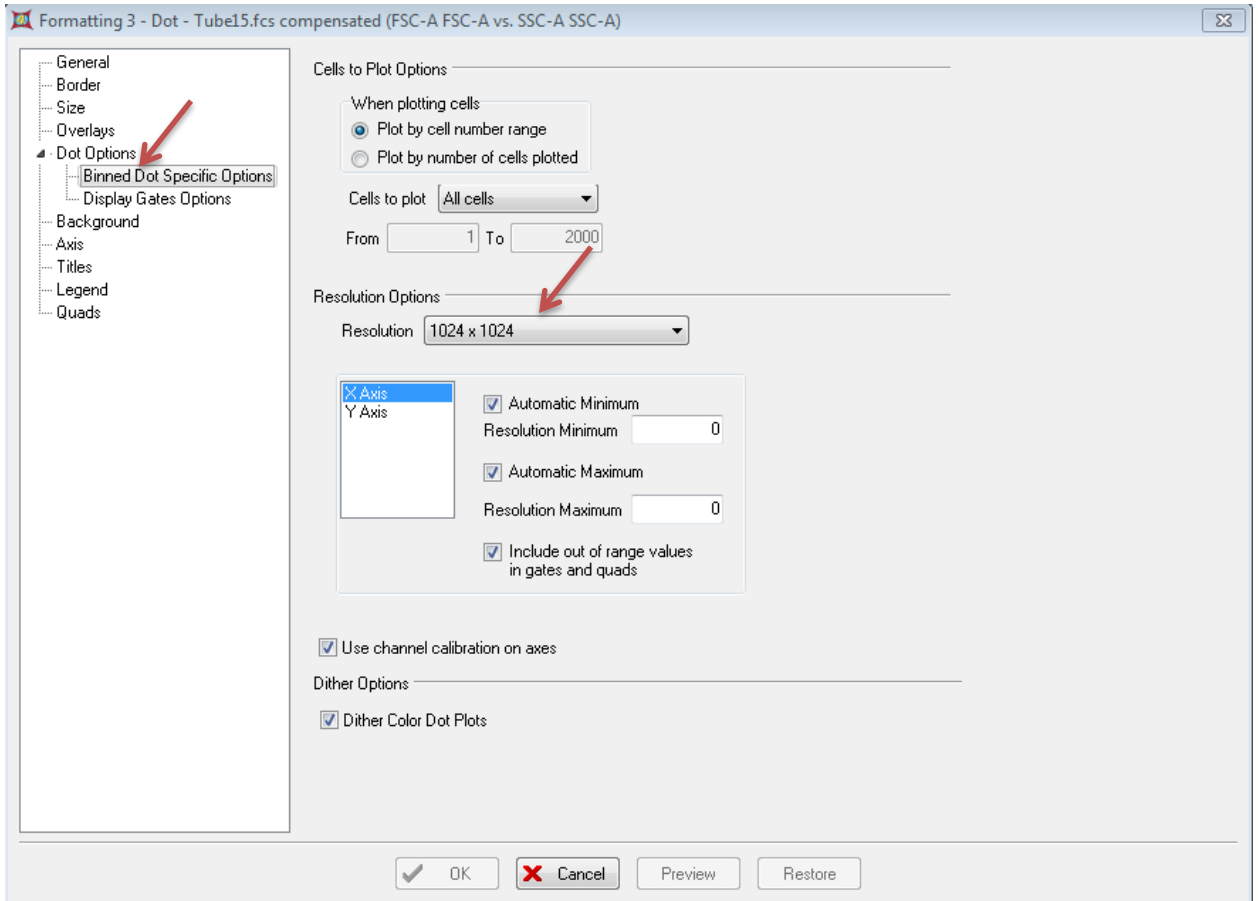
2. Select "Axis" on the left panel.
3. On the right panel, for Y axis:
 - a. Enter 10000 for minimum
 - b. Enter 2000000 for maximum
 - c. On Scale, select Linear from the drop down menu



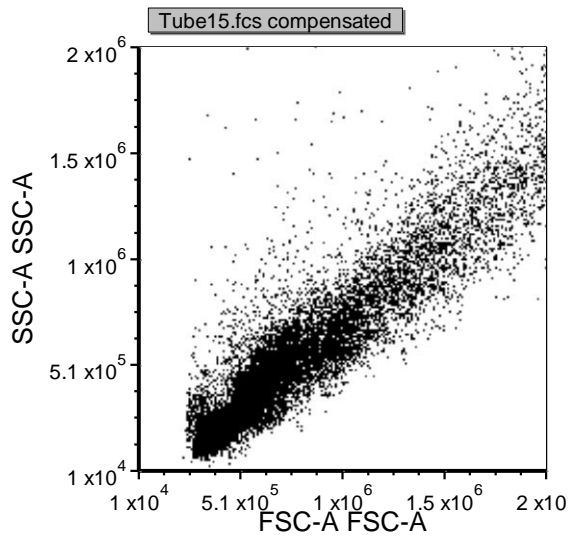
4. Do the same for the X axis.
 - a. Enter 10000 for minimum
 - b. Enter 2000000 for maximum
 - c. On Scale, select Linear from the drop down menu



5. Select "Dot Options" then "Binned Dot Specific Options"
 - a. Select 1024x1024

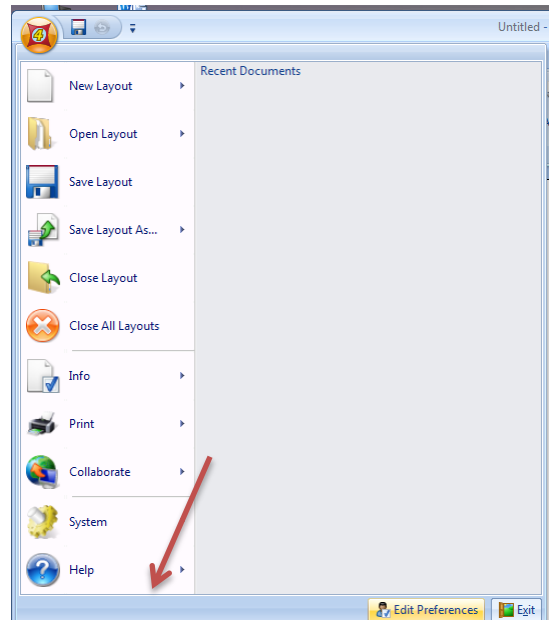


6. Select "ok". Now the scatter profile is the same as it did in the CytoFLEX.



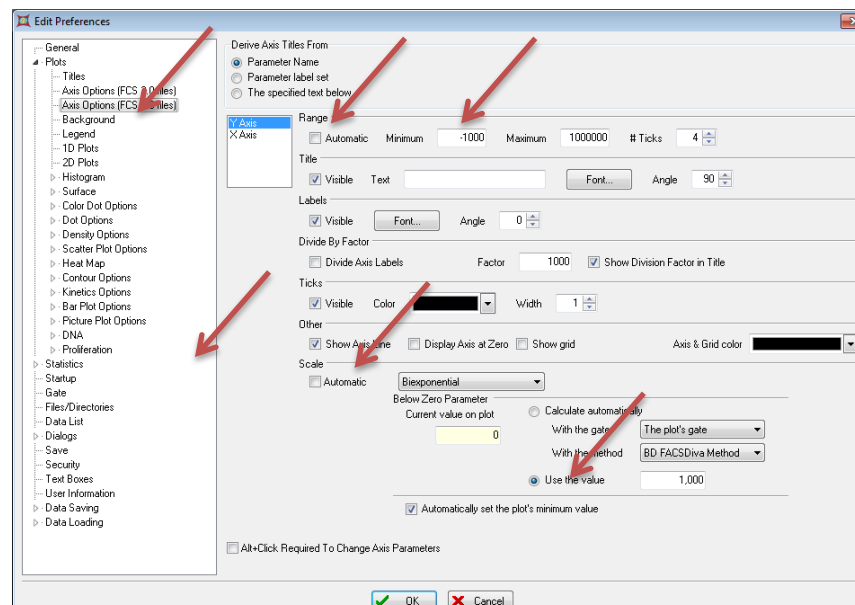
Set default preference for plot view in FSC Express v4.0:

1. Select FCSEXPRESS icon, then select edit preferences.

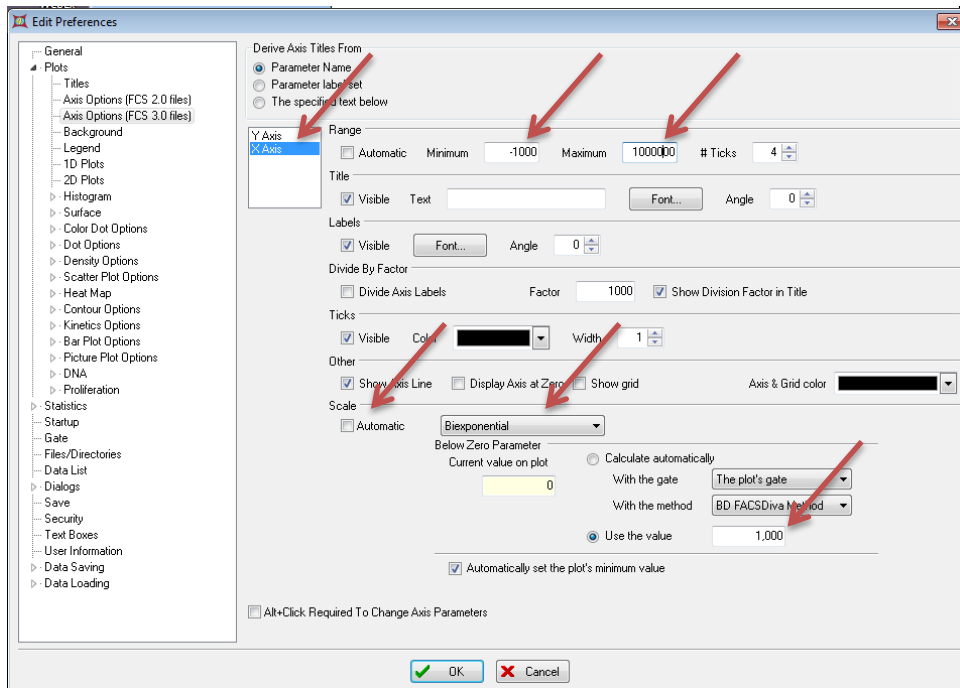


2. In the Edit Preferences window, Select "Plots" then "Axis Options [FCS 3.0 files]". On the right panel, input the following for the Y axis:

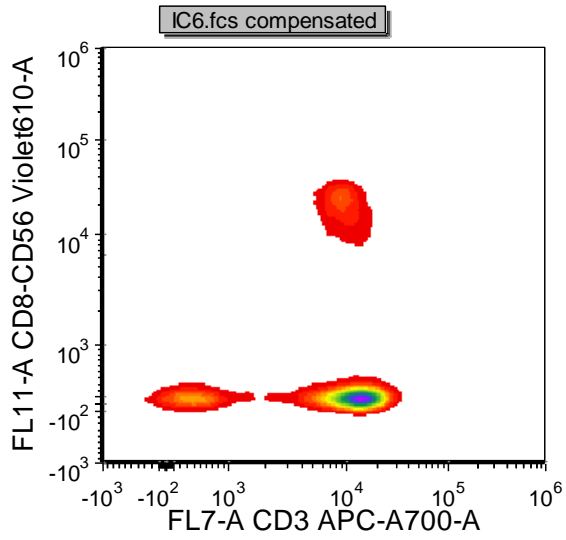
- a. Minimum -1000
- b. Maximum 1000000
- c. Scale: Select "Biexponential" from the drop down menu and unselect "automatic". Select "Use the value" and enter 1000.



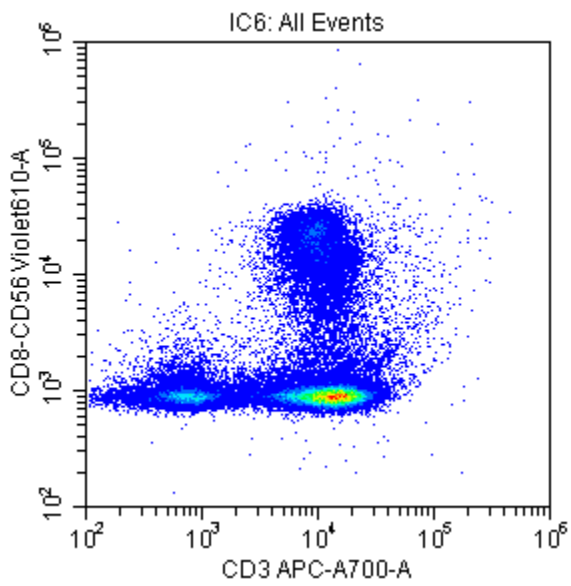
3. Follow the same procedure for the X axis.



1. Select ok.
2. Quit program.
3. Restart FCS Express.
4. Import data.



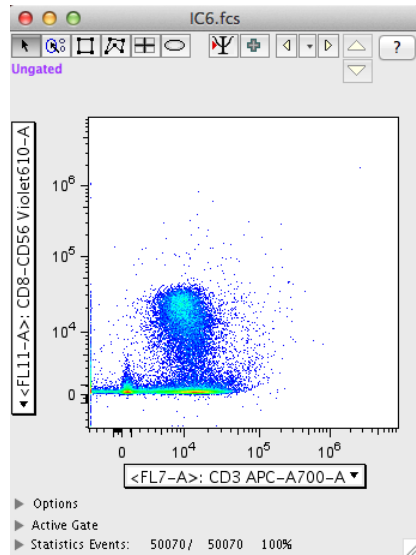
FCS Express default display



CytExpert default display

FlowJo v9.7.7

When transporting CytExpert data files into FlowJo v9.7.7 the data appears as below:

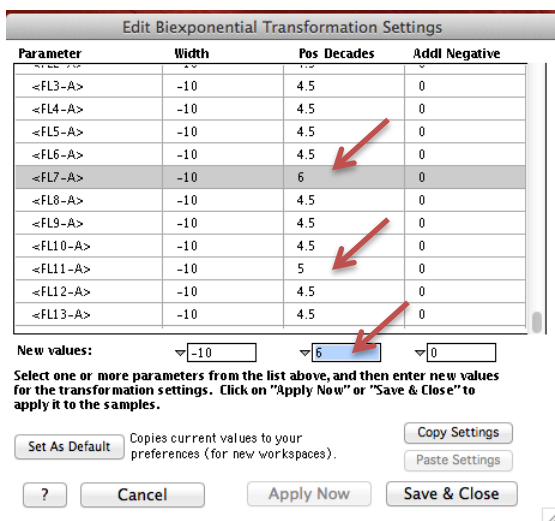


To fix this:

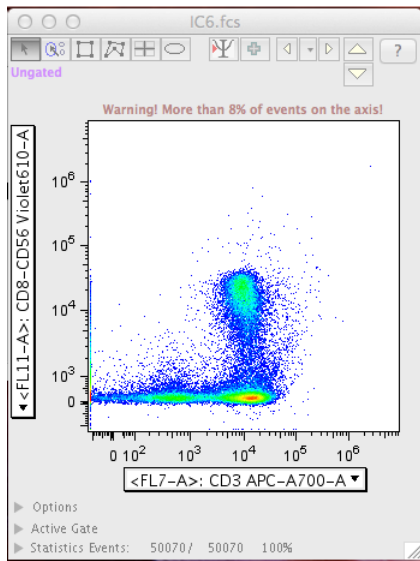
1. Go to Platform – Biexponential Transformation – Manually specify Transform



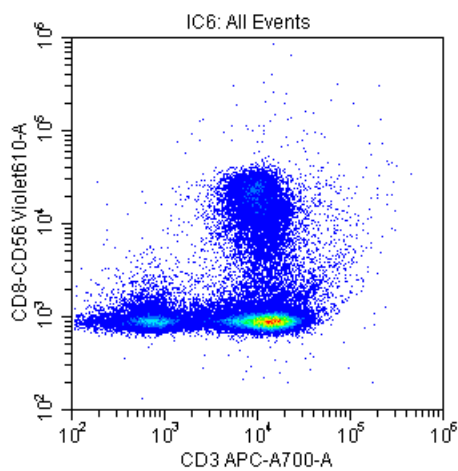
2. In the “Edit Biexponential Transformation Settings” window, enter values that are higher than the default value then press enter, followed by selecting “Apply Now”.



3. The new transformation appears in the plot:



This view is now similar to the data as seen in the CytoFLEX CytExpert plot.



Unfortunately, for this version (9.7.7), FlowJo does not allow the user to set the maximum value to be viewed; therefore, the decade display cannot be changed and stayed as a 7-decade plot.

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