



# Viewing Data

Module FG 0103

Search for text in the presentation

Presentation script

Presentation thumbnails

Presentation outline



Presentation toolbar

PDF attachment

# Purpose

## In this module you will learn:

- Learn how to load and view time series data using the Multi Run Viewer

# Objective

**Upon Completion of this module, you will be able to:**

- Access the Multi Run Viewer from FabGuard Web or FabGuard IPM
- Load Runs manually or from the FabGuard database
- View and filter loaded Runs
- Navigate the Bins tab

# Outline

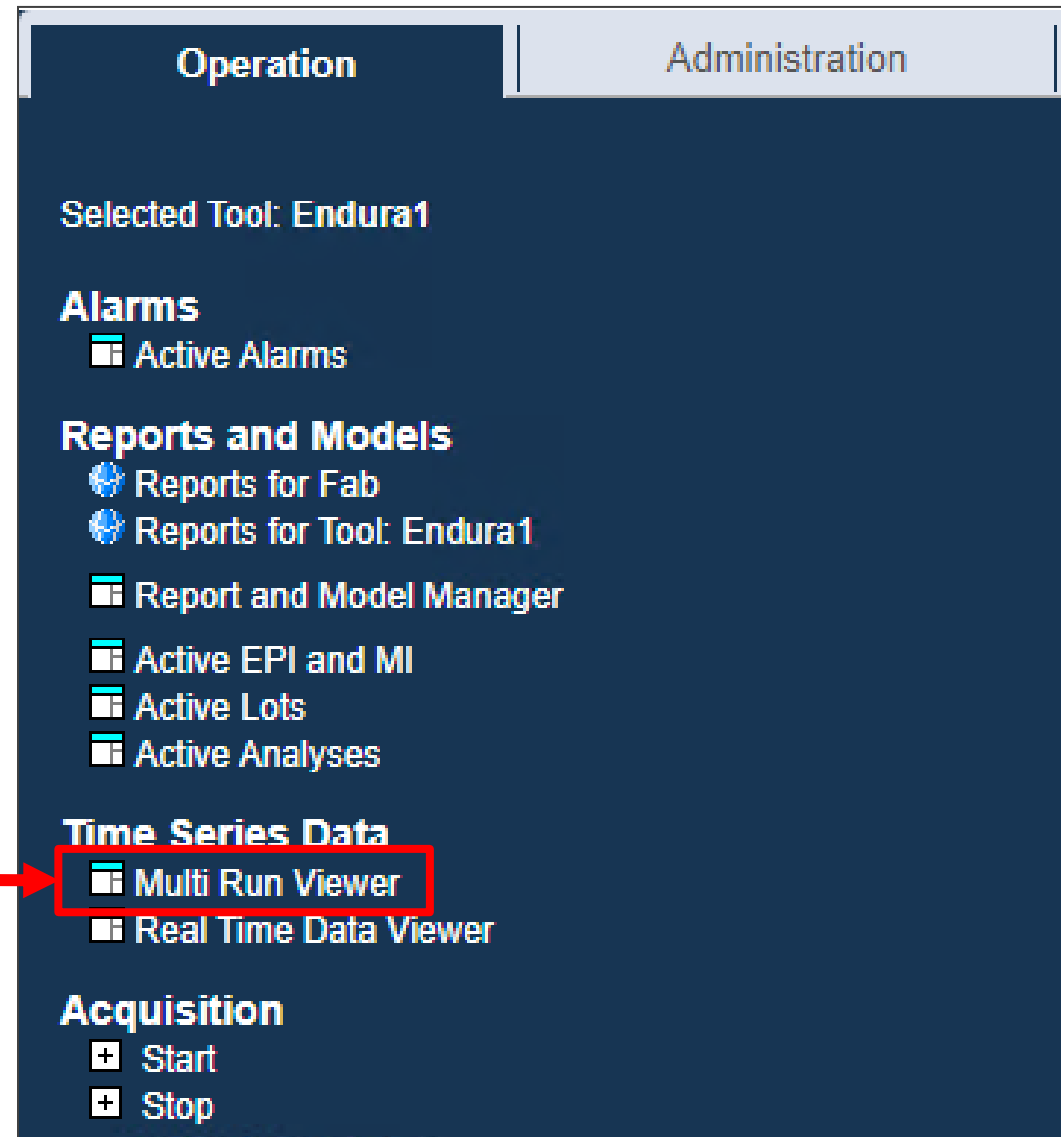
- 1 Access the Multi Run Viewer and load Runs
- 2 Bins Tab: Data Plot
- 3 Bins Tab: Bin Controls
- 4 Bins Tab: Run Controls
- 5 Bins Tab: Plot Controls
- 6 Filtering loaded Runs

**1**

# Access the Multi Run Viewer and Load Runs

# Accessing Multi Run Viewer from FabGuard Web

From the **Operation** tab,  
click **Multi Run Viewer**.

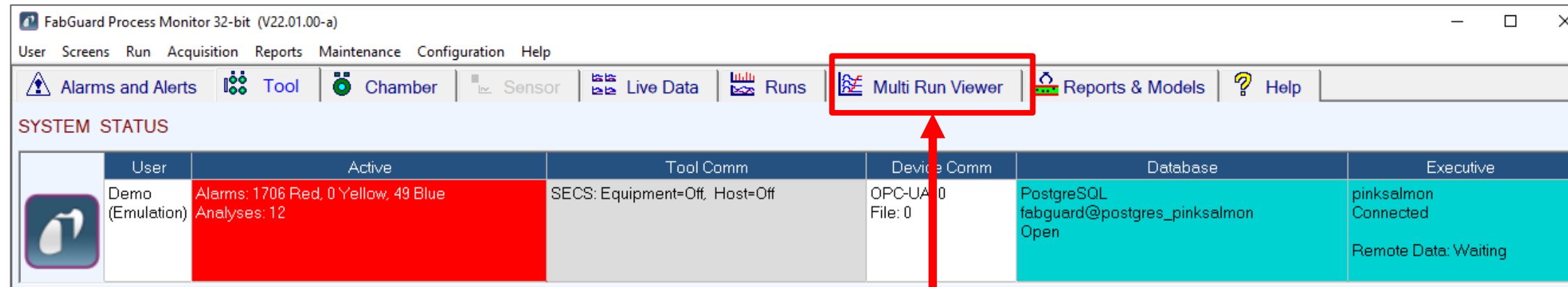
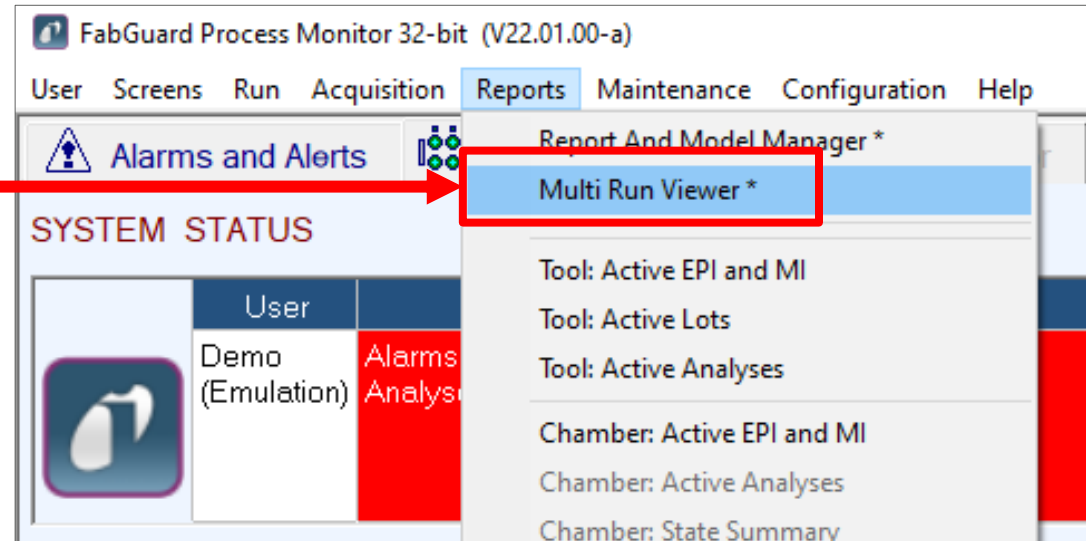


The screenshot shows the FabGuard web interface with two tabs: 'Operation' (active) and 'Administration'. Under the 'Operation' tab, the 'Selected Tool' is 'Endura1'. The interface is organized into several sections:

- Alarms**
  - Active Alarms
- Reports and Models**
  - Reports for Fab
  - Reports for Tool: Endura1
  - Report and Model Manager
  - Active EPI and MI
  - Active Lots
  - Active Analyses
- Time Series Data**
  - Multi Run Viewer** (highlighted with a red box and a red arrow pointing to it from the text on the left)
  - Real Time Data Viewer
- Acquisition**
  - Start
  - Stop

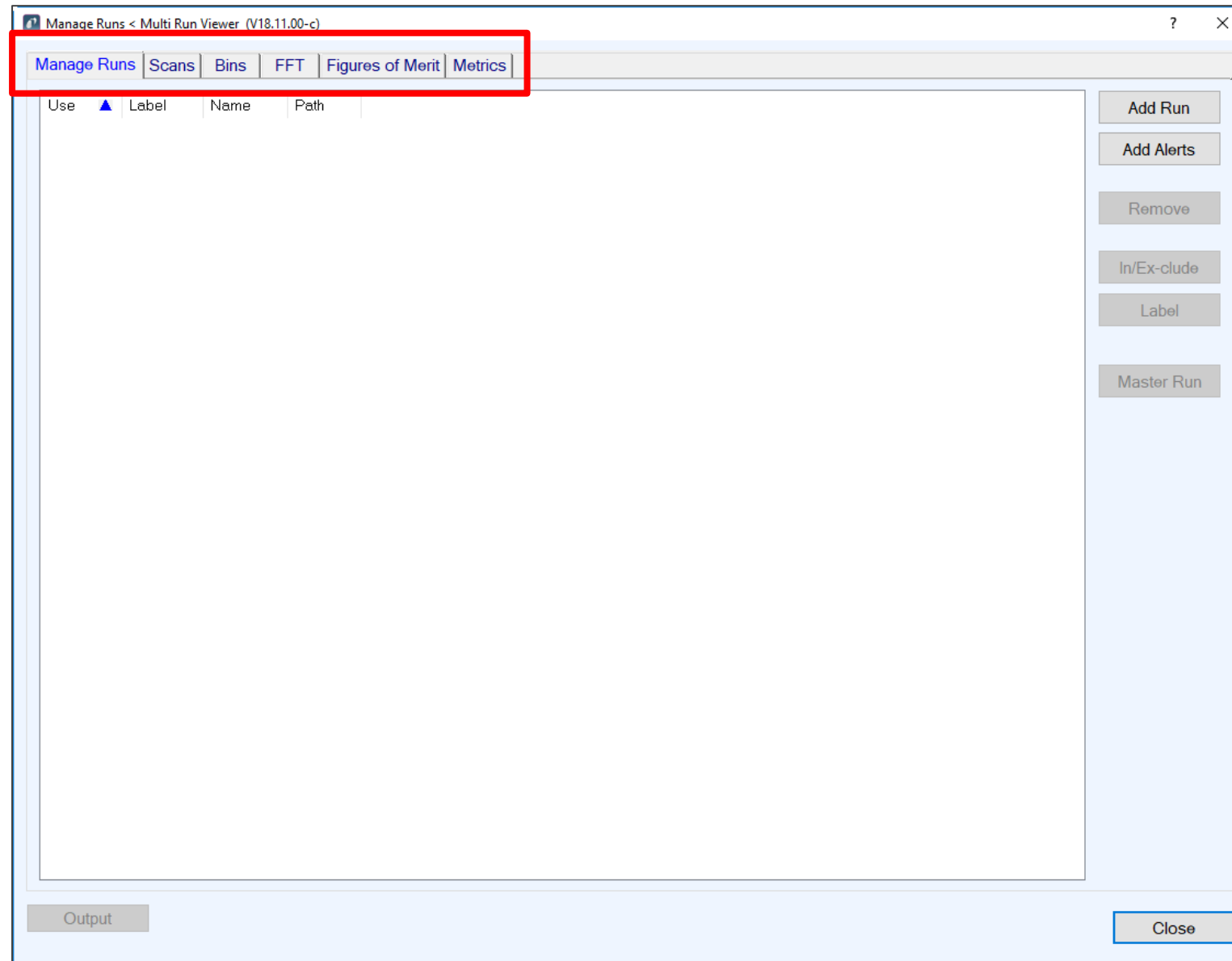
# Accessing Multi Run Viewer from FabGuard IPM

A- From the **Reports** menu, click **Multi Run Viewer**.



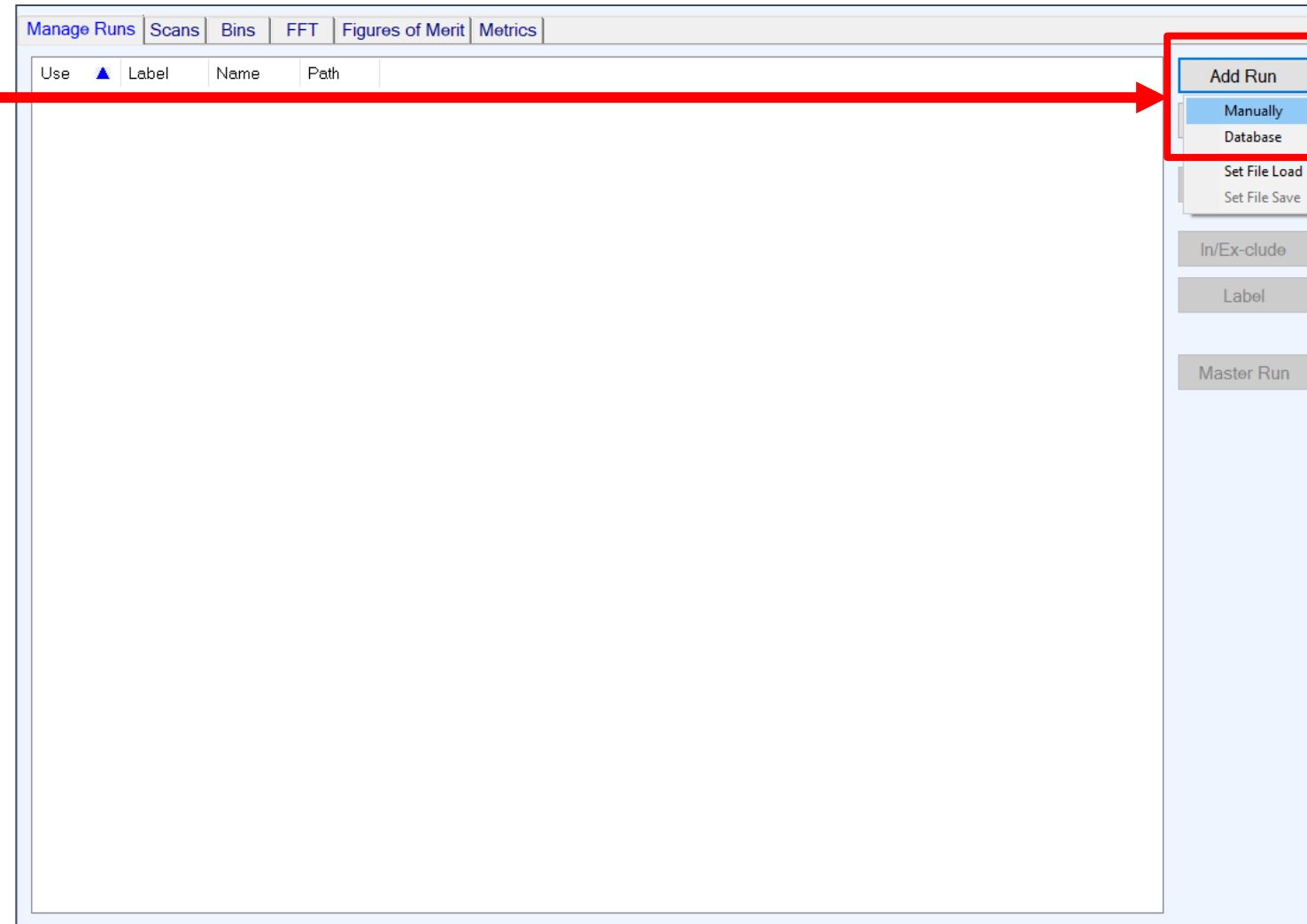
B- Click the **Multi Run Viewer** tab.

# Multi Run Viewer Screen



# Loading Runs Manually

Click **Add Run**  
and select  
**Manually**.



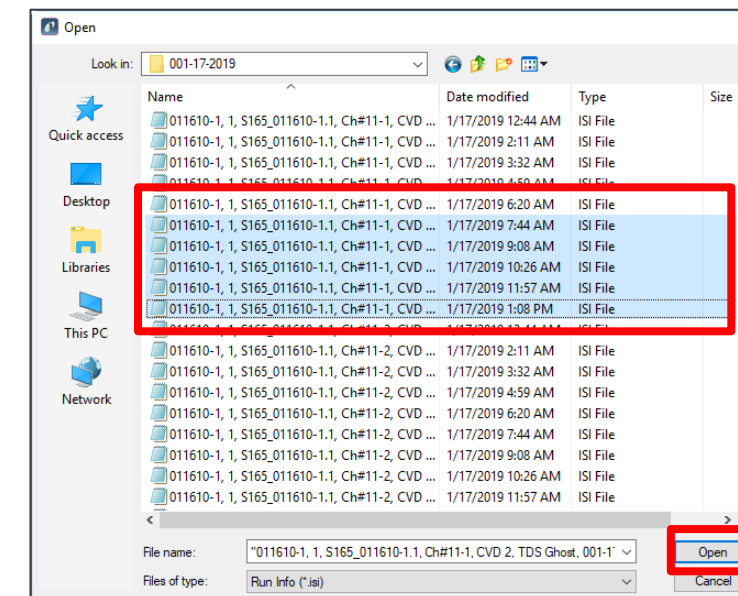
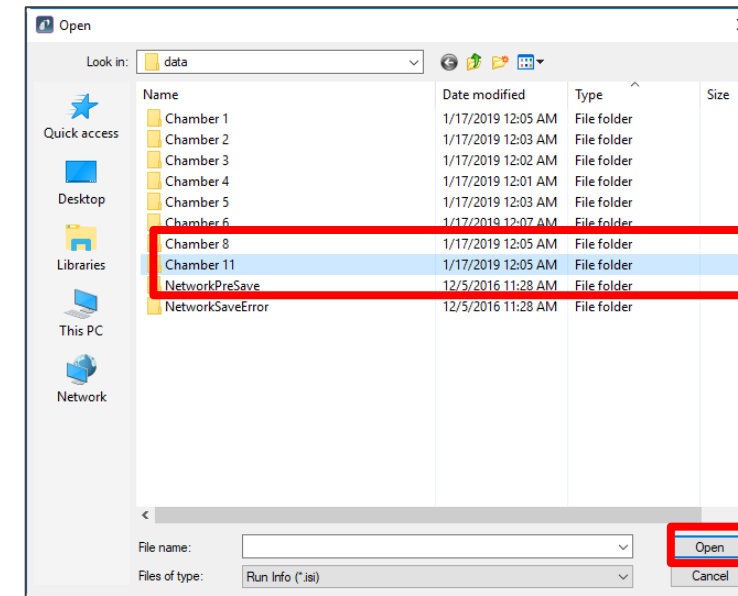
# Loading Runs Manually

1- From the data folder select the Chamber # folder for the desired Runs and click **Open**.

2- Select the date folder that contains the Run files and click **Open**.

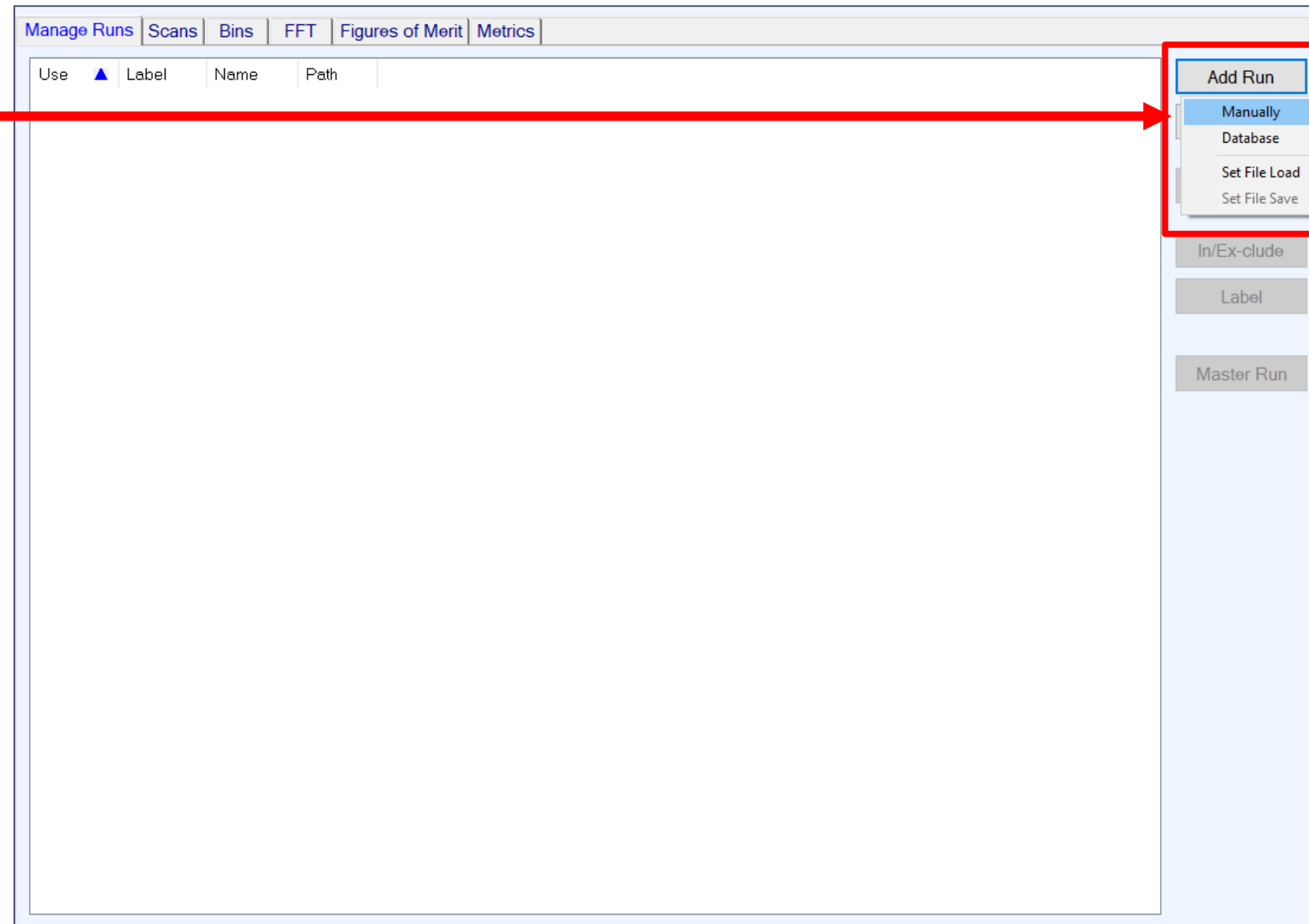
3- Select one or more Runs and click **Open** to load them into the Multi Run Viewer.

4- Repeat to load Run files from additional Chambers or dates.



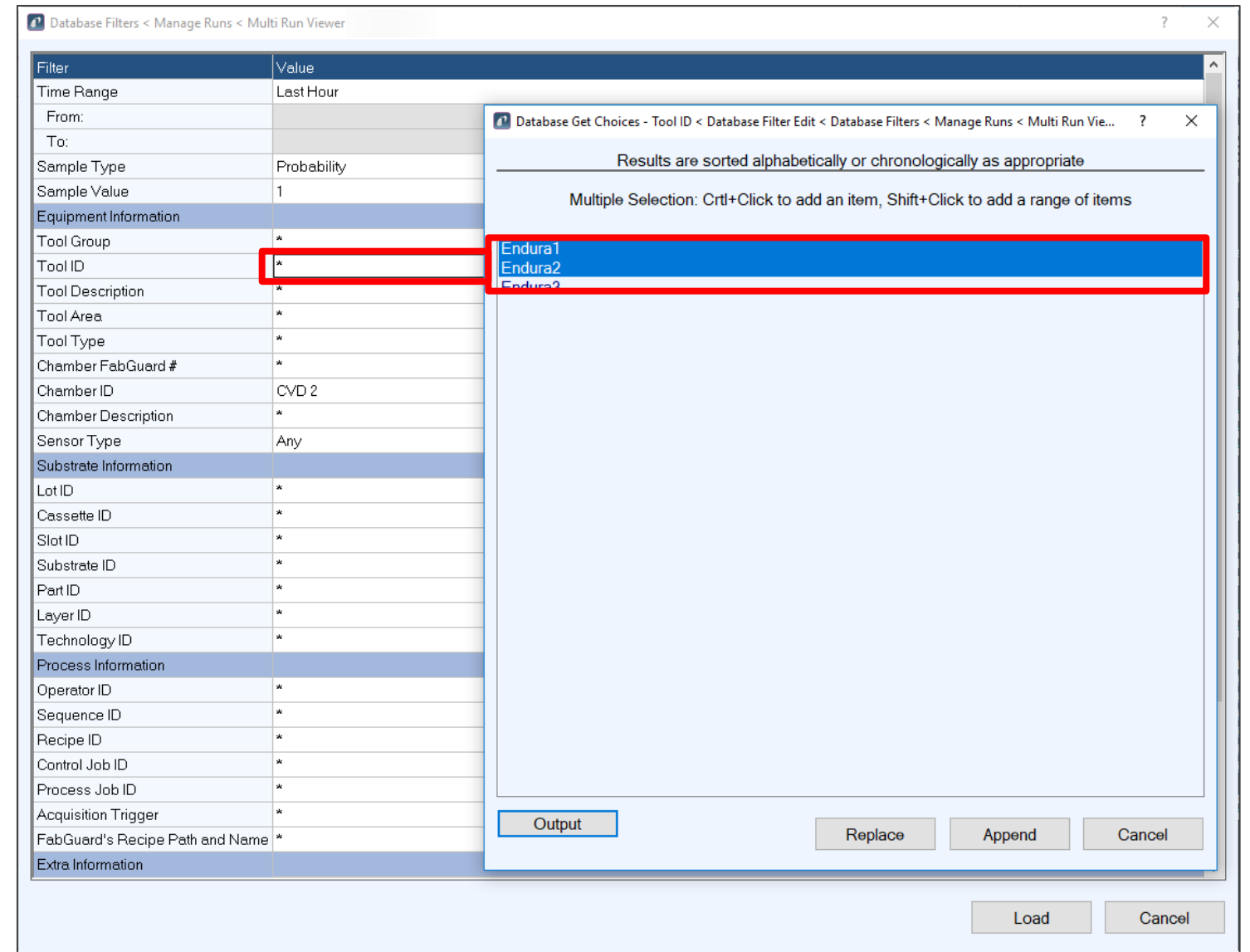
# Loading Runs Using the Database

Click **Add Run** and select **Database**.



# Database Filters

- 1- Right-click a filter.
- 2- Select **Get available from database** to display options.
- 3- Select the filter choices.
- 4- Click **Ok** to save the selection.
- 5- Repeat steps 1-4 for any additional filters.
- 6- Click **Load** to return to the **Manage Runs** tab.

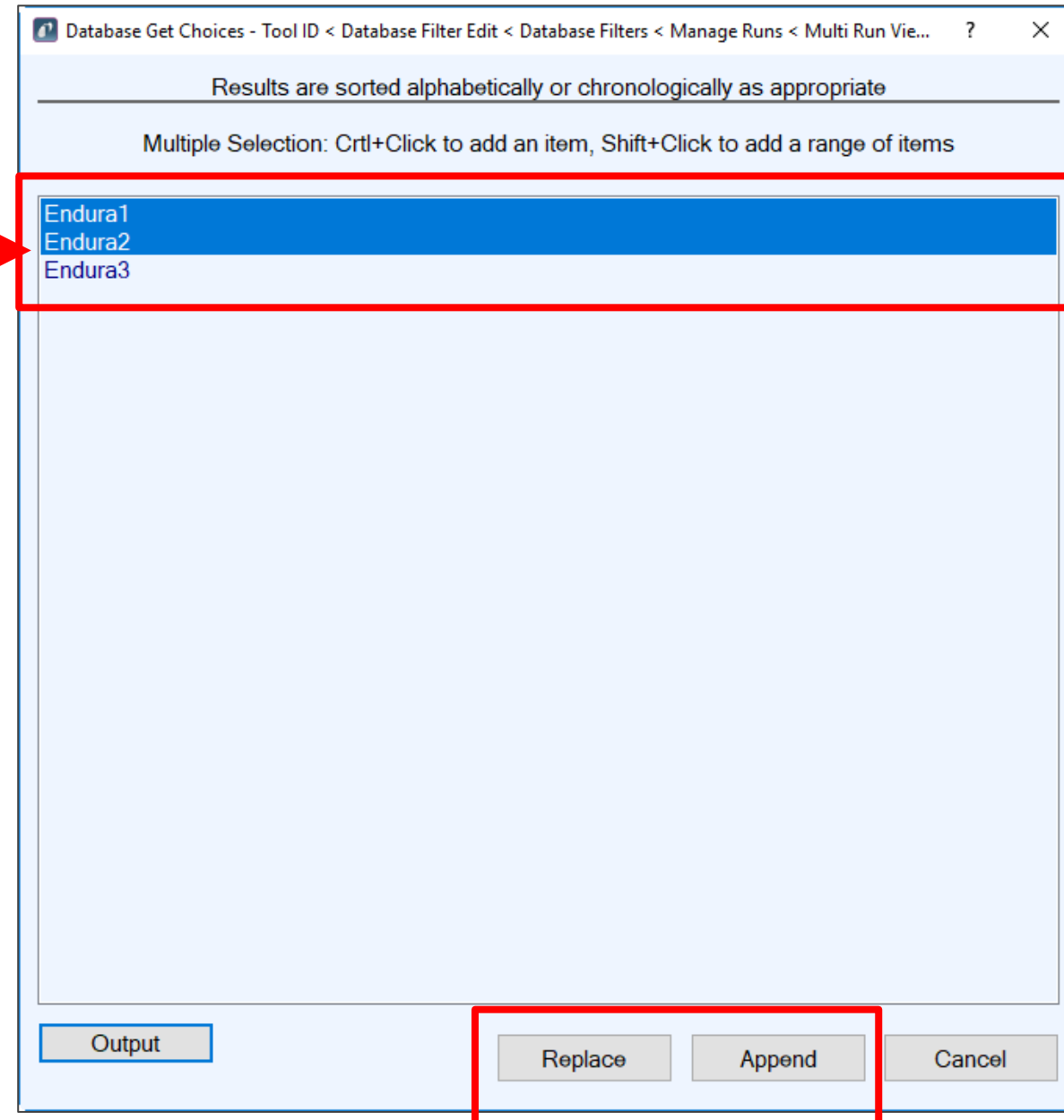


# Database Filters Time Range

Filter	Value
Time Range	Last Hour
From:	Last Hour
To:	Today
Sample Type	Yesterday
Sample Value	This Week (Saturday)
Equipment Information	This Week (Sunday)
Tool Group	This Week (Monday)
Tool ID	This Month
Tool Description	This Fiscal Month (Saturday)
Tool Type	This Year
Chamber FabGuard #	Last 24 Hours
Chamber ID	Last 3 Days
Chamber Description	Last 7 Days
Sensor Type	Last 30 Days
Substrate Information	Last 60 Days
Lot ID	Last 90 Days
Cassette ID	Last 6 Months
Slot ID	Last 12 Months
Substrate ID	Previous Full Day
Part ID	Previous Full Week (Saturday)
Layer ID	Previous Full Week (Sunday)
Technology ID	Previous Full Week (Monday)
	Previous Full Month
	Previous 3 Days
	Previous 7 Days
	Previous 30 Days
	Previous 60 Days
	Previous 90 Days
	Hour Range
	Any Time After
	Any Time Before

# Database Filters Get Values

- 1- From the **Database Filter** screen, right-click **Tool ID**.
- 2- Select **Get available from database**.
- 3- Select your choices.
- 4- Click **Replace** or **Append** to save changes to the filter.



# List of Runs

The screenshot shows a software window titled "Manage Runs < Multi Run Viewer". It features a tabbed interface with "Manage Runs" selected. Below the tabs is a table with the following columns: "Use", "Label", "Name", and "Path". The "Use" column contains blue checkmarks. The "Name" column lists various run identifiers such as "011510-1, 10, S165\_011510-1.10, Ch#11-1, CVD 2, TDS ...". The "Path" column shows file paths like "\\nficon\data\Chamber 11\001-18-2019". To the right of the table is a vertical sidebar with buttons: "Add Run", "Add Alerts", "Remove", "In/Ex-clude", "Label", and "Master Run". At the bottom of the window are "Output" and "Close" buttons.

Use	Label	Name	Path
✓		011510-1, 10, S165_011510-1.10, Ch#11-1, CVD 2, TDS ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 10, S165_011510-1.10, Ch#11-2, CVD 2, RFS1...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 11, S165_011510-1.11, Ch#11-1, CVD 2, TDS ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 11, S165_011510-1.11, Ch#11-2, CVD 2, RFS1...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 12, S165_011510-1.12, Ch#11-1, CVD 2, TDS ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 12, S165_011510-1.12, Ch#11-2, CVD 2, RFS1...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 13, S165_011510-1.13, Ch#11-1, CVD 2, TDS ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 13, S165_011510-1.13, Ch#11-2, CVD 2, RFS1...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 14, S165_011510-1.14, Ch#11-1, CVD 2, TDS ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 14, S165_011510-1.14, Ch#11-2, CVD 2, RFS1...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 15, S165_011510-1.15, Ch#11-1, CVD 2, TDS ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 15, S165_011510-1.15, Ch#11-2, CVD 2, RFS1...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 16, S165_011510-1.16, Ch#11-1, CVD 2, TDS ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 16, S165_011510-1.16, Ch#11-2, CVD 2, RFS1...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 17, S165_011510-1.17, Ch#11-1, CVD 2, TDS ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 17, S165_011510-1.17, Ch#11-2, CVD 2, RFS1...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 18, S165_011510-1.18, Ch#11-1, CVD 2, TDS ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 18, S165_011510-1.18, Ch#11-2, CVD 2, RFS1...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 19, S165_011510-1.19, Ch#11-1, CVD 2, TDS ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 19, S165_011510-1.19, Ch#11-2, CVD 2, RFS1...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 3, S165_011510-1.3, Ch#11-1, CVD 2, TDS Gh...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 3, S165_011510-1.3, Ch#11-2, CVD 2, RFS100 ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 4, S165_011510-1.4, Ch#11-1, CVD 2, TDS Gh...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 4, S165_011510-1.4, Ch#11-2, CVD 2, RFS100 ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 5, S165_011510-1.5, Ch#11-1, CVD 2, TDS Gh...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 5, S165_011510-1.5, Ch#11-2, CVD 2, RFS100 ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 6, S165_011510-1.6, Ch#11-1, CVD 2, TDS Gh...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 6, S165_011510-1.6, Ch#11-2, CVD 2, RFS100 ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 7, S165_011510-1.7, Ch#11-1, CVD 2, TDS Gh...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 7, S165_011510-1.7, Ch#11-2, CVD 2, RFS100 ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 8, S165_011510-1.8, Ch#11-1, CVD 2, TDS Gh...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 8, S165_011510-1.8, Ch#11-2, CVD 2, RFS100 ...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 9, S165_011510-1.9, Ch#11-1, CVD 2, TDS Gh...	\\nficon\data\Chamber 11\001-18-2019
✓		011510-1, 9, S165_011510-1.9, Ch#11-2, CVD 2, RFS100 ...	\\nficon\data\Chamber 11\001-18-2019
✓		011511-1, 1, S165_011511-1.1, Ch#11-1, CVD 2, TDS Gh...	\\nficon\data\Chamber 11\001-18-2019

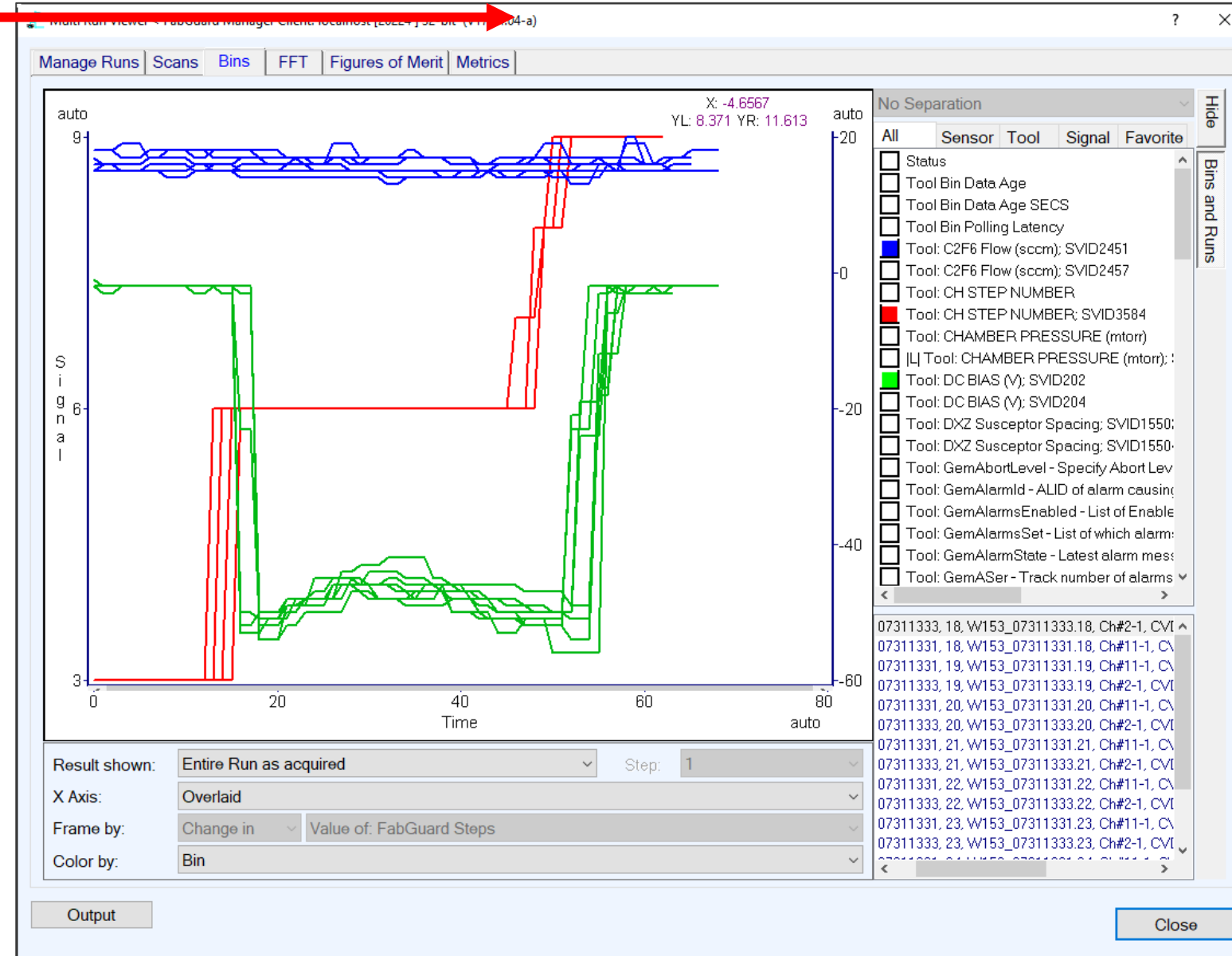
**2**

## **Bins Tab: Data Plot**

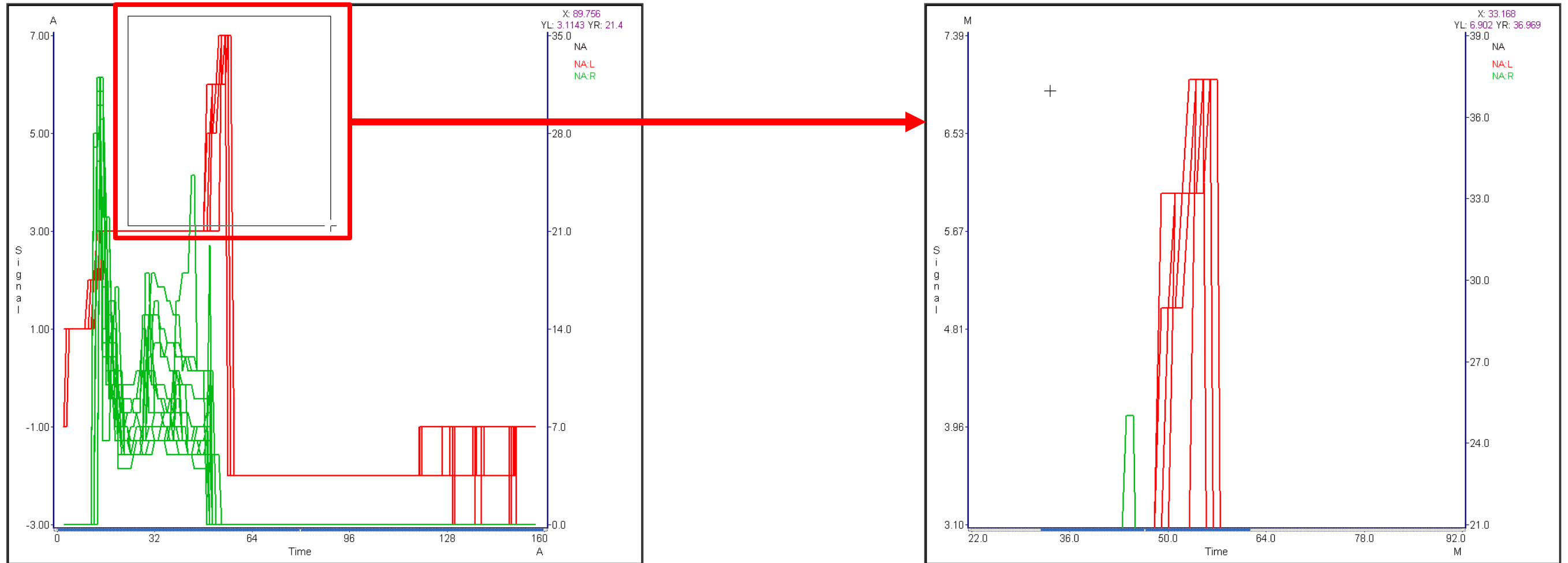


# Full Screen Shortcut

Double-click  
Title Bar



# Basic Data Plot Functions: Zoom

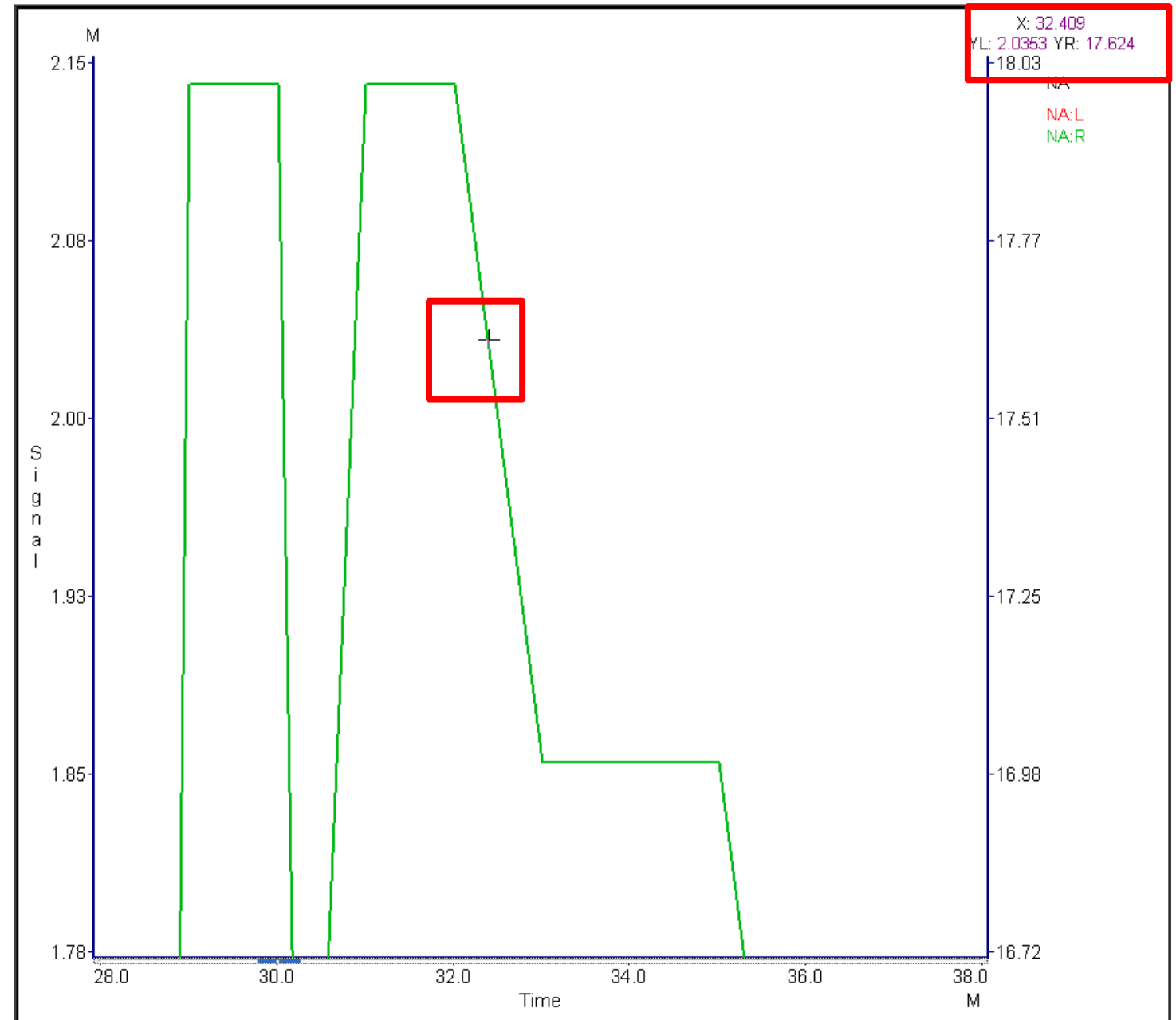


- 1- Click and drag the mouse pointer over a region of interest.
- 2- Double-click anywhere in the plot to return to the full view.

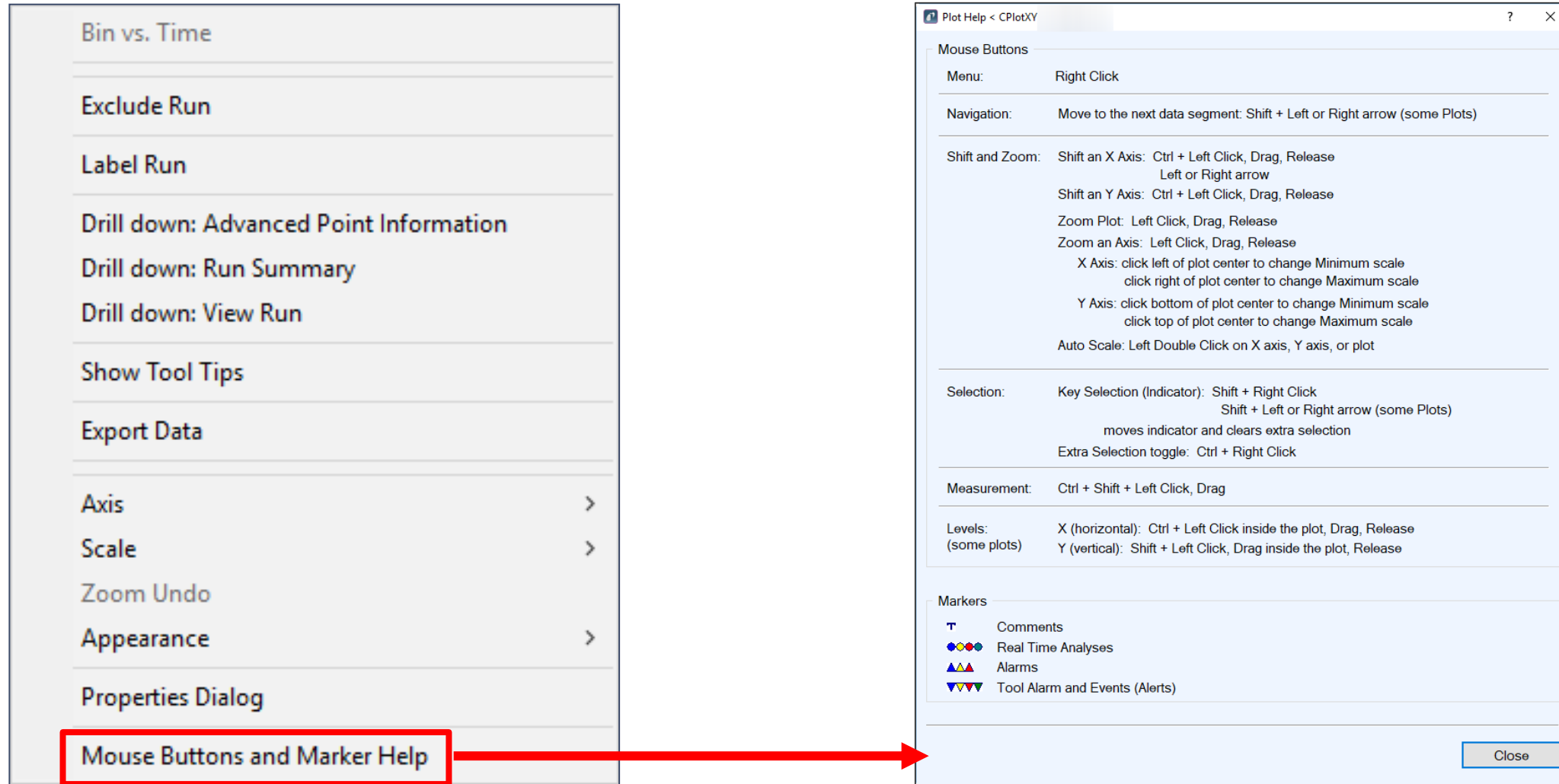
# Basic Data Plot Functions: Graph Coordinates

1- Mouse over a point on the plot.

2- The X, Left Y-axis, and Right Y-axis coordinates will be displayed in the upper right.

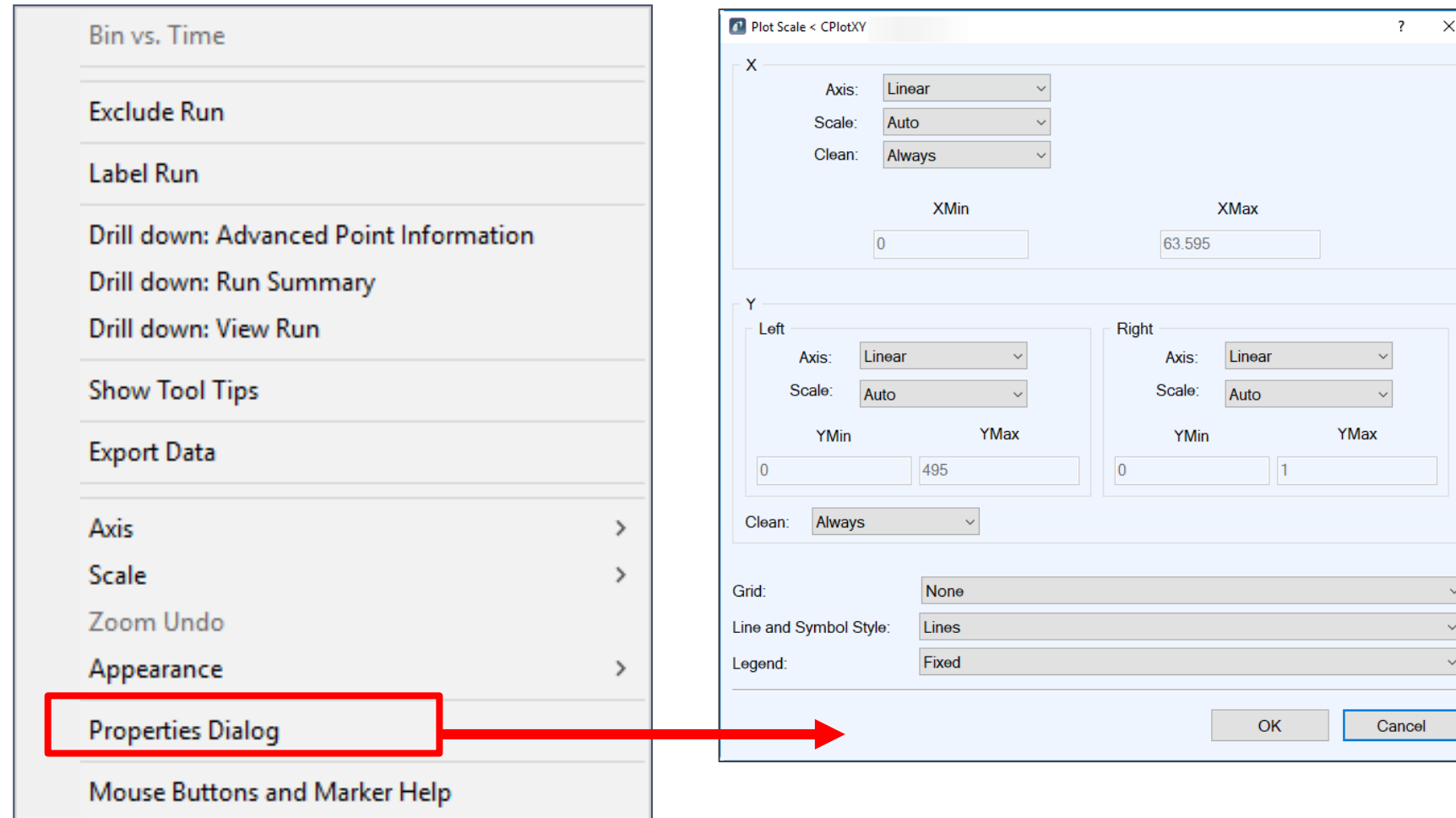


# Basic Data Plot Functions: Right-click Menu



Right-click anywhere in the plot to open the right-click menu.

# Basic Data Plot Functions: Right-click Menu

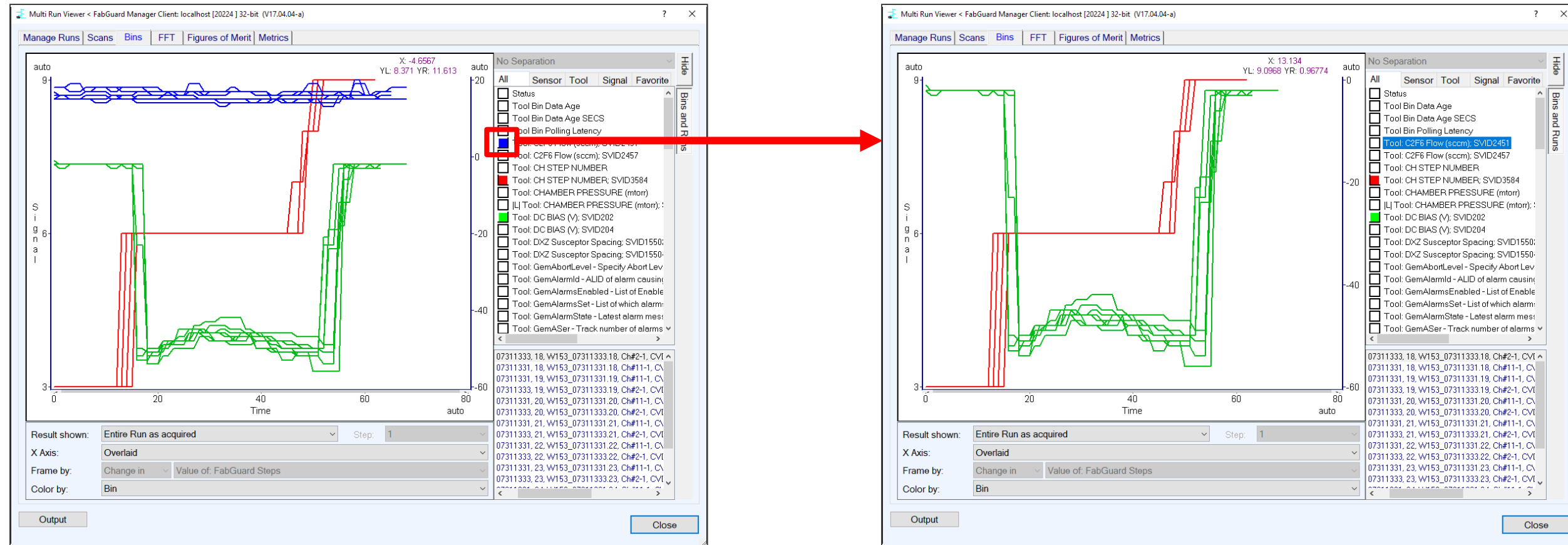


Right-click anywhere in the plot to open the right-click menu.



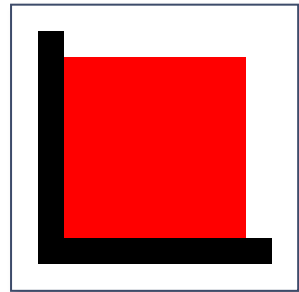
## The Tool Tab

# Bin Controls: Selection

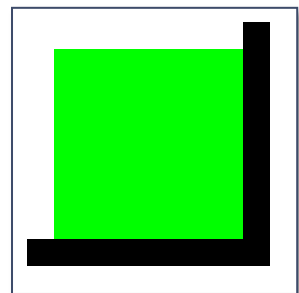


- 1- Clicking a selected Bin will remove that Bin from the data plot.
- 2- Clicking an unselected Bin will add that Bin to the data plot scaled to the left-axis.
- 3- Right-clicking an unselected Bin will add that Bin to the data plot scaled to the right-axis.

# Bin Controls: Selection by Axis



When a Bin is scaled to the left-axis, the selection box will indicate the left-axis with a black line.

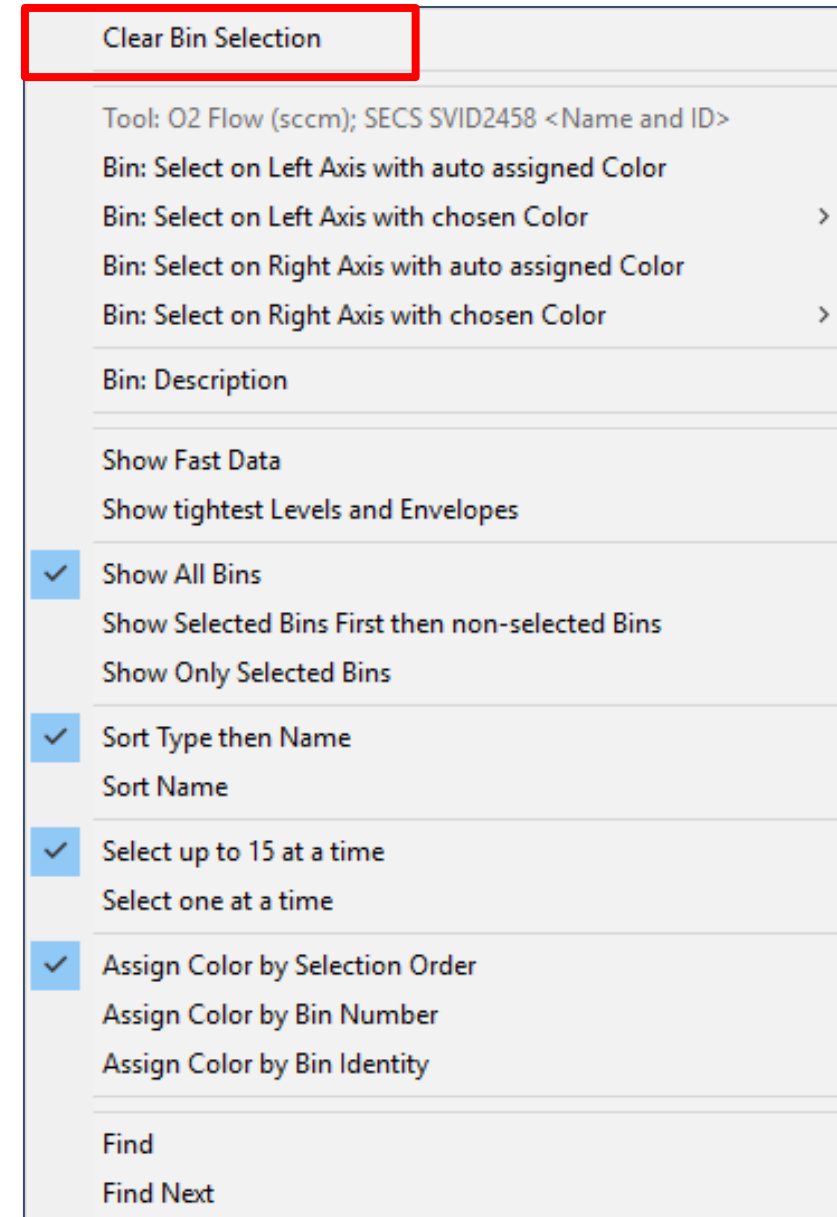


When a Bin is scaled to the right-axis, the selection box will indicate the right-axis with a black line.

# Bin Controls: Right-click Menu

Right-clicking a Bin provides additional commands, such as **Clear Bin Selection**.

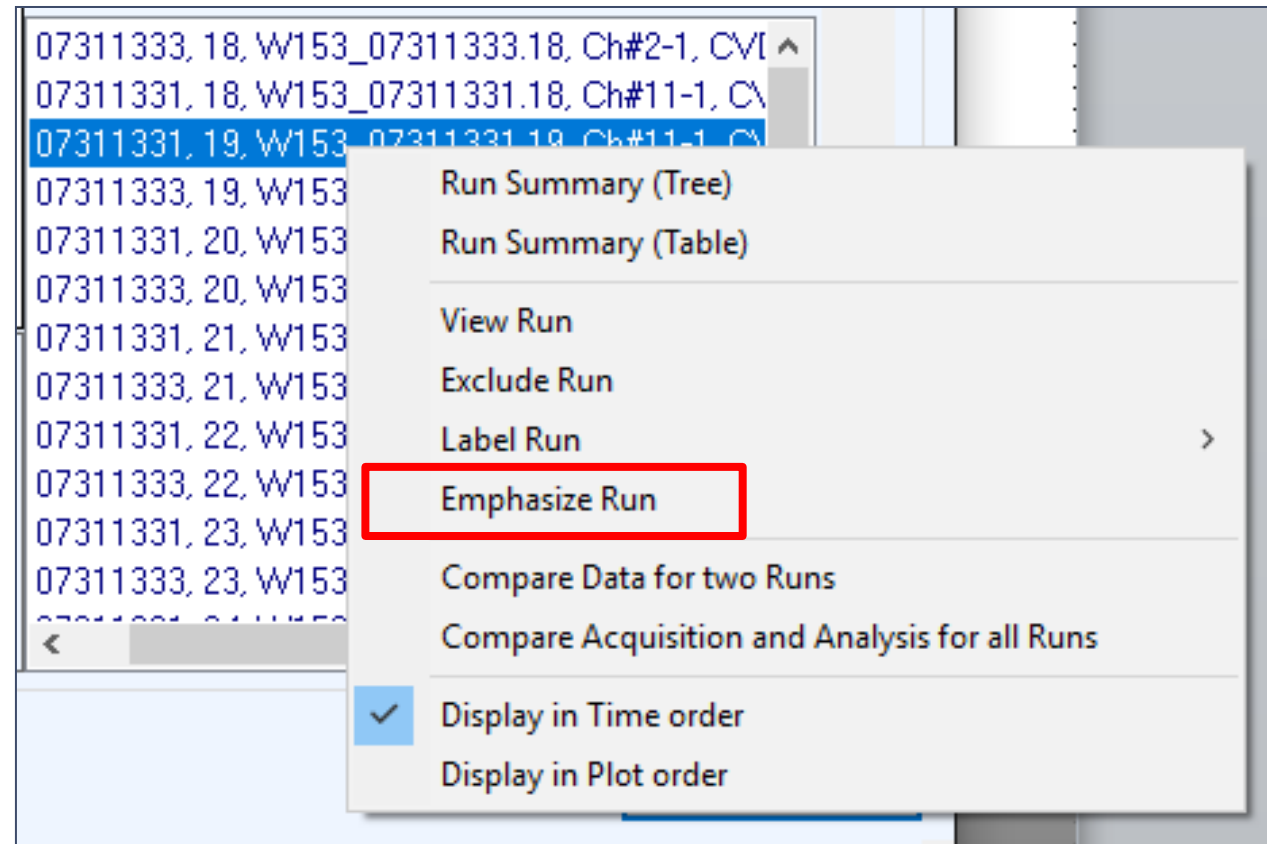
**Clear Bin Selection** will deselect all selected Bins and clear the data plot.





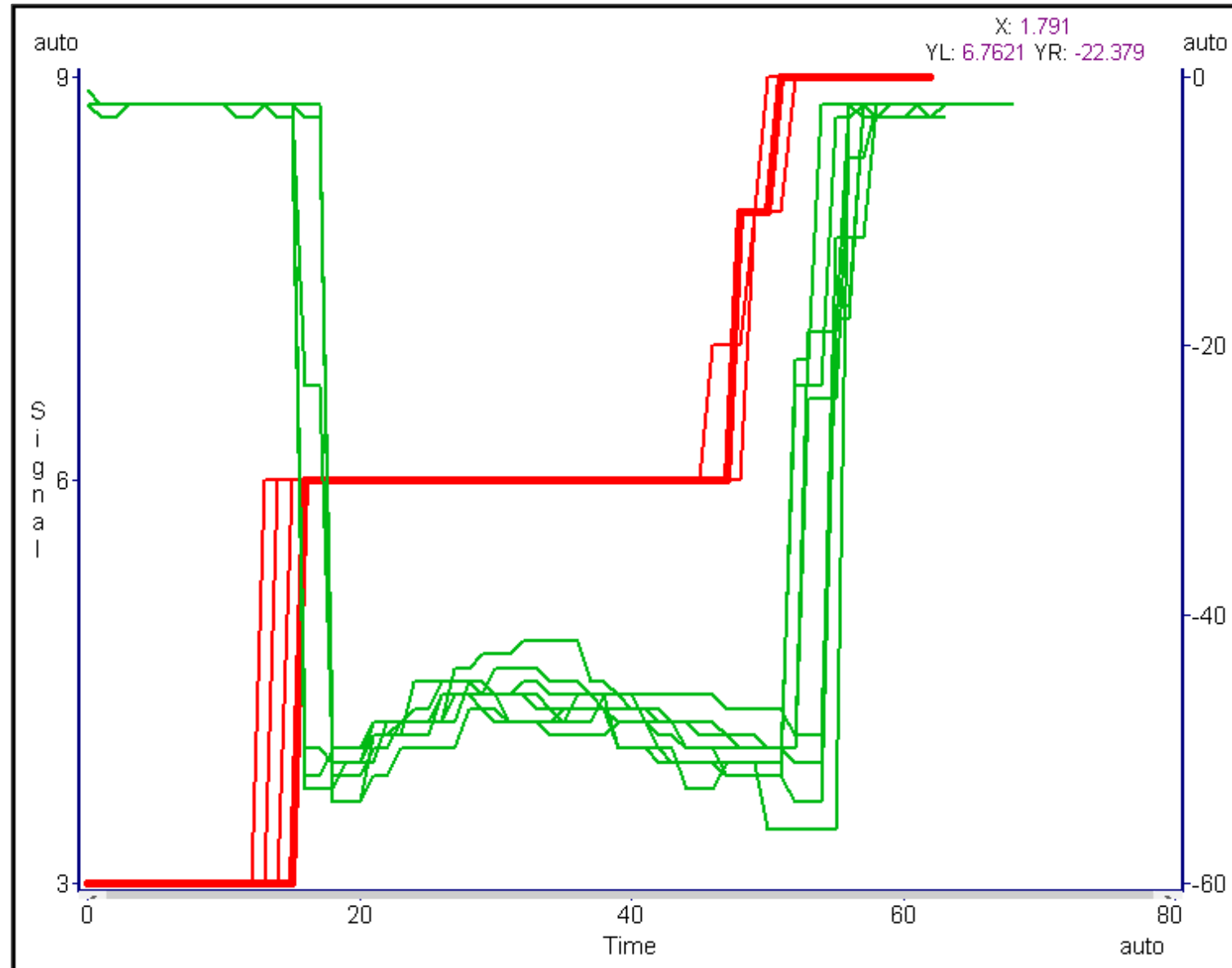
## **Bins Tab: Run Controls**

# Viewing a Modified Report



Right-clicking a Run provides additional commands, such as **Emphasize Run**. When a Run is emphasized, the time series data traces belonging to that Run are plotted in bold so that they stand out.

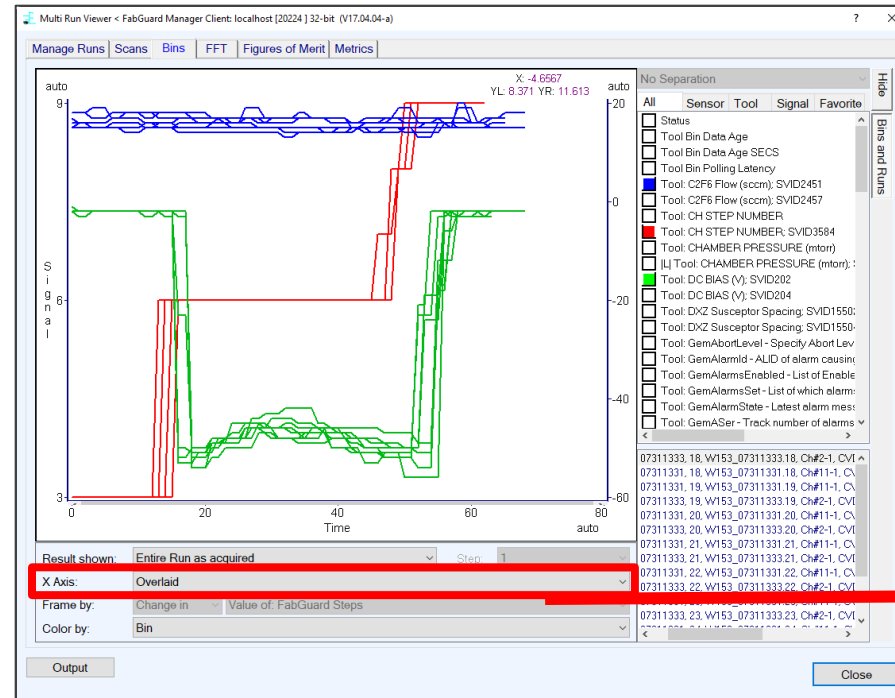
# Run Controls: Emphasize Run



**5**

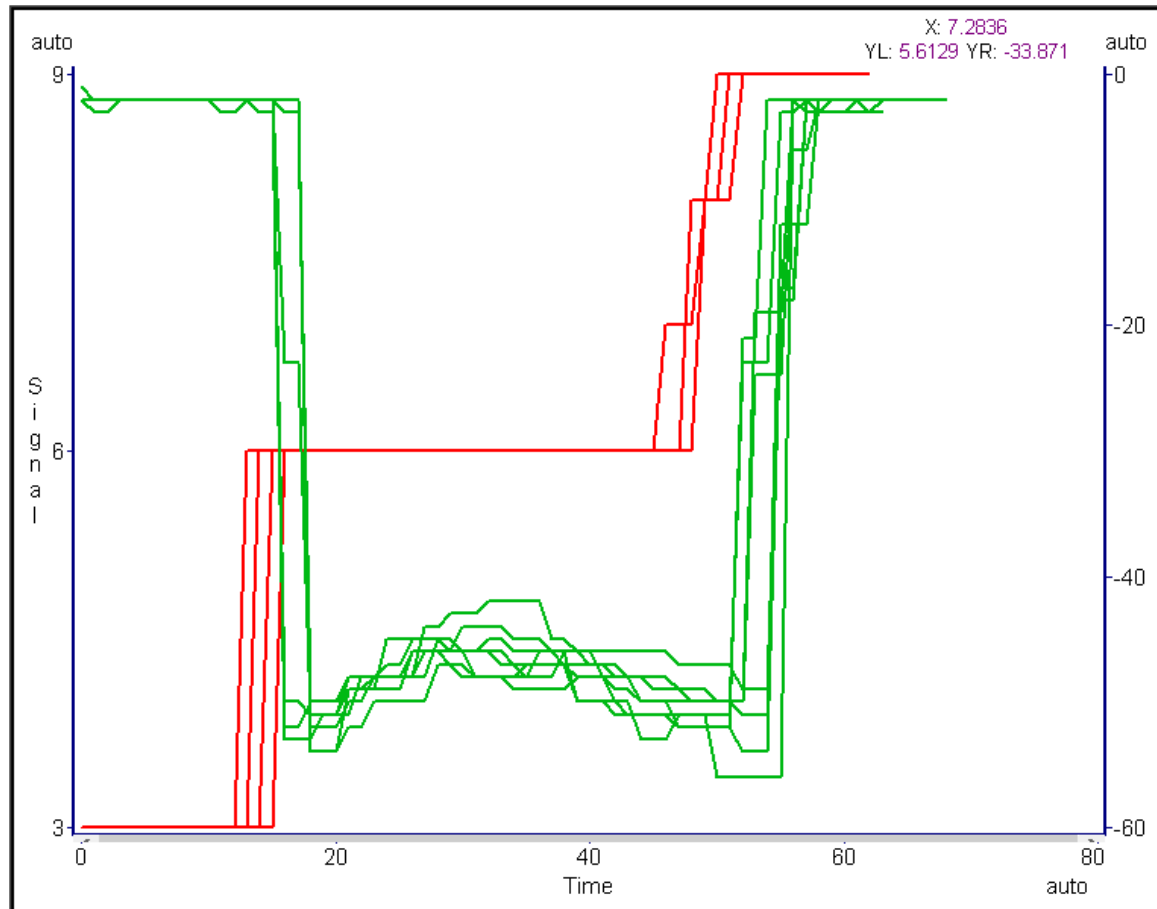
## **Bins Tab: Plot Controls**

# Plot Controls: X-axis Drop Down

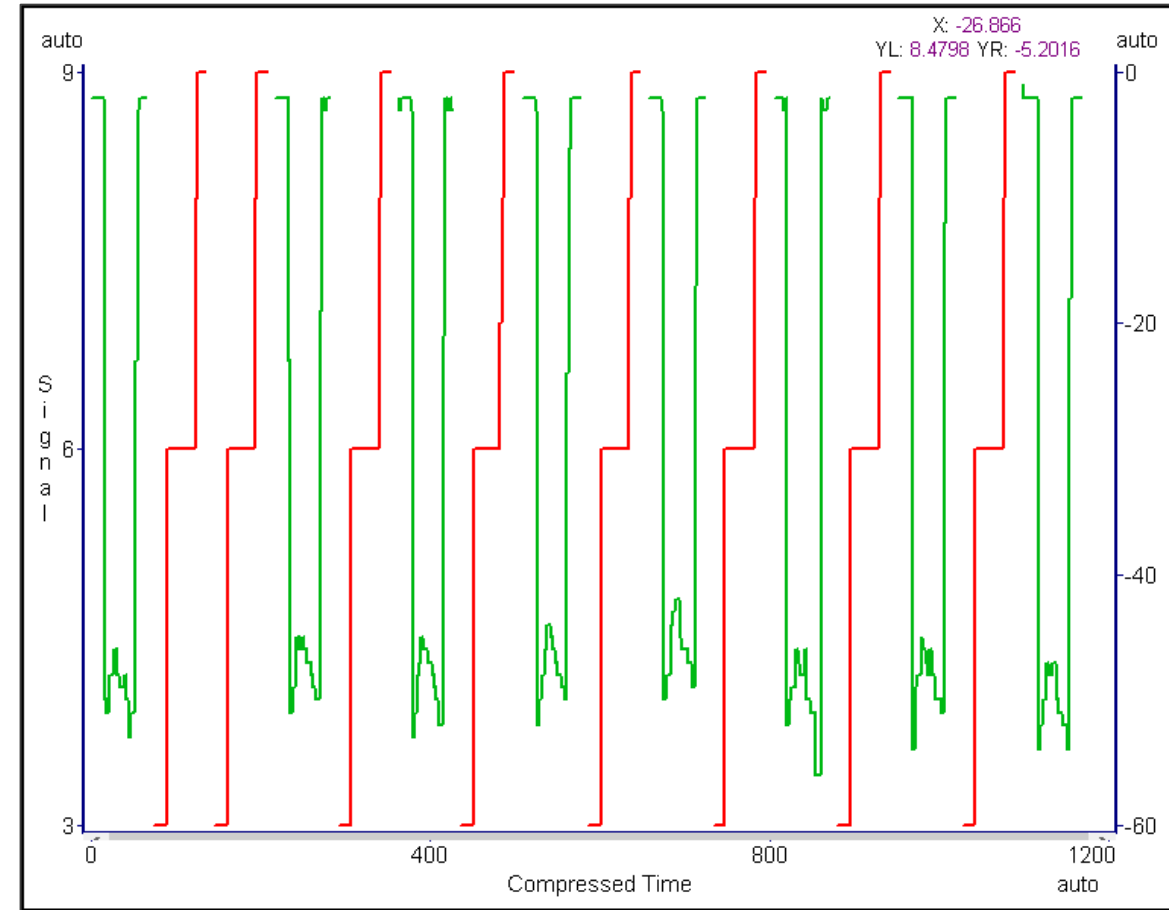


- ### Overlaid
- Sorted by Time (MM/DD/YY)
  - Sorted by Time (DD/MM/YY)
  - Sorted by Time (YY/MM/DD)
- 
- Consecutive by Run
  - Consecutive by Substrate
  - Consecutive by Week Number (ISO)
  - Consecutive by Tool Group
  - Consecutive by Tool ID
  - Consecutive by Tool and Chamber ID
  - Consecutive by Tool, Chamber, Recipe ID
  - Consecutive by Tool Description
  - Consecutive by Tool Type
  - Consecutive by Chamber Number
  - Consecutive by Chamber ID
  - Consecutive by Chamber Description
  - Consecutive by Operator ID
  - Consecutive by Sequence ID
  - Consecutive by Recipe ID
  - Consecutive by Lot ID
  - Consecutive by Cassette ID
  - Consecutive by Slot ID
  - Consecutive by Substrate ID
  - Consecutive by Part ID
  - Consecutive by Layer ID
  - Consecutive by Technology ID
  - Consecutive by Extra 1 ID
  - Consecutive by Extra 2 ID

# Plot Controls: Overlaid vs. Consecutive



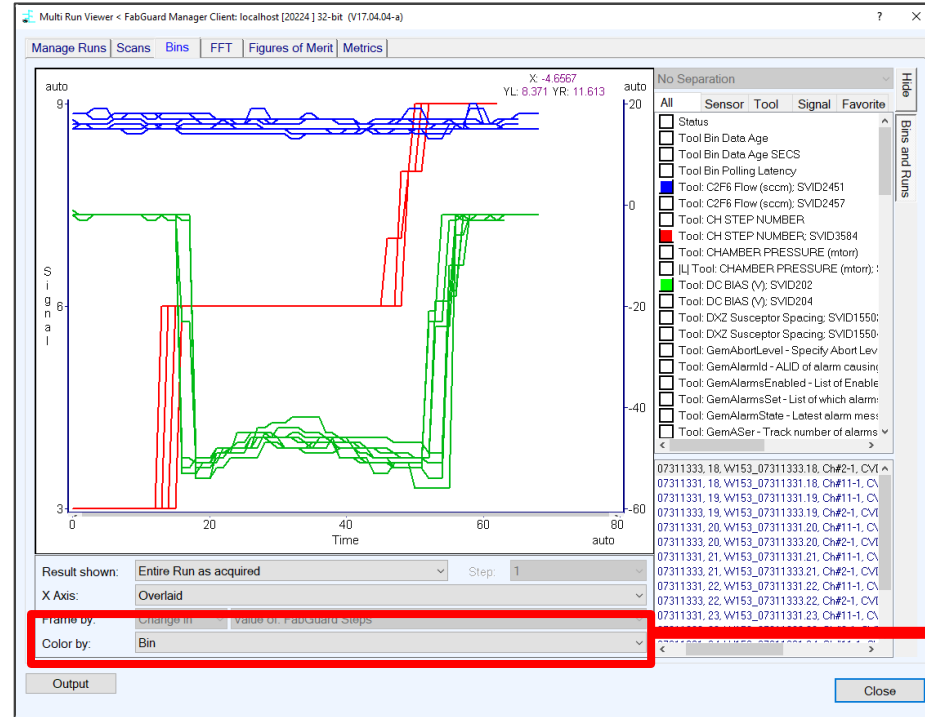
Overlaid



Consecutive by Run

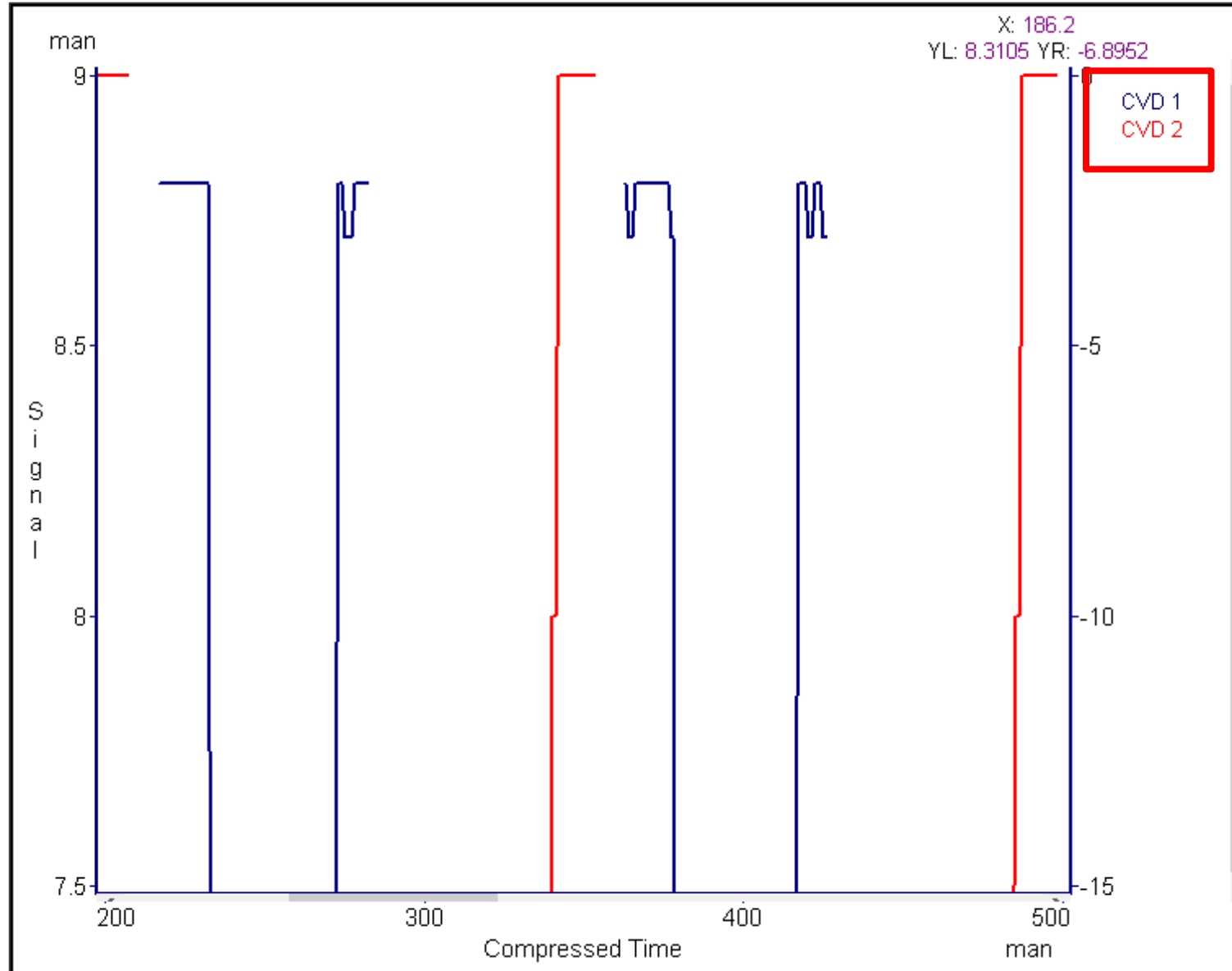


# Plot Controls: Color by Drop Down



- Bin
- 
- Run
- Tool and Chamber ID
- Tool, Chamber, Recipe ID
- Tool Group
- Tool ID
- Tool Description**
- Tool Type
- Chamber Number
- Chamber ID
- Chamber Description
- Lot ID
- Cassette ID
- Slot ID
- Substrate ID
- Part ID
- Layer ID
- Technology ID
- Operator ID
- Sequence ID
- Recipe ID
- Acquisition Trigger
- FabGuard's Recipe
- Extra 1 ID
- Extra 2 ID
- Extra 3 ID
- Extra 4 ID
- Extra 5 ID
-

# Plot Controls: Color by Chamber ID



**5**

# Filtering Loaded Runs

# Return to Manage Runs

Manage Runs < Multi Run Viewer < FabGuard Manager Client: localhost [20224 ] 32-bit (V17.04.04-a)

Manage Runs | Scans | Bins | FFT | Figures of Merit | Metrics

Use	Label	Name	Path	Start Time	Tool ID
✓▲		07311331, 18, W153_07311331.18, Ch#11-1, CVD 2, TDS...	\\Inficon\data\Chamber 11\008-02-2017	08/02/2017 09:52:18	Endura3
✓▲		07311331, 19, W153_07311331.19, Ch#11-1, CVD 2, TDS...	\\Inficon\data\Chamber 11\008-02-2017	08/02/2017 09:56:28	Endura3
✓▲		07311331, 20, W153_07311331.20, Ch#11-1, CVD 2, TDS...	\\Inficon\data\Chamber 11\008-02-2017	08/02/2017 10:00:37	Endura3
✓▲		07311331, 21, W153_07311331.21, Ch#11-1, CVD 2, TDS...	\\Inficon\data\Chamber 11\008-02-2017	08/02/2017 10:04:44	Endura3
✓▲		07311331, 22, W153_07311331.22, Ch#11-1, CVD 2, TDS...	\\Inficon\data\Chamber 11\008-02-2017	08/02/2017 10:08:58	Endura3
✓▲		07311331, 23, W153_07311331.23, Ch#11-1, CVD 2, TDS...	\\Inficon\data\Chamber 11\008-02-2017	08/02/2017 10:13:22	Endura3
✓▲		07311331, 24, W153_07311331.24, Ch#11-1, CVD 2, TDS...	\\Inficon\data\Chamber 11\008-02-2017	08/02/2017 10:17:35	Endura3
✓▲		07311331, 25, W153_07311331.25, Ch#11-1, CVD 2, TDS...	\\Inficon\data\Chamber 11\008-02-2017	08/02/2017 10:21:48	Endura3
✓▲		07311333, 18, W153_07311333.18, Ch#2-1, CVD 1, TDS ...	\\Inficon\data\Chamber 2\008-02-2017	08/02/2017 09:52:07	Endura3
✓▲		07311333, 19, W153_07311333.19, Ch#2-1, CVD 1, TDS ...	\\Inficon\data\Chamber 2\008-02-2017	08/02/2017 09:56:33	Endura3
✓▲		07311333, 20, W153_07311333.20, Ch#2-1, CVD 1, TDS ...	\\Inficon\data\Chamber 2\008-02-2017	08/02/2017 10:00:58	Endura3
✓▲		07311333, 21, W153_07311333.21, Ch#2-1, CVD 1, TDS ...	\\Inficon\data\Chamber 2\008-02-2017	08/02/2017 10:05:15	Endura3
✓▲		07311333, 22, W153_07311333.22, Ch#2-1, CVD 1, TDS ...	\\Inficon\data\Chamber 2\008-02-2017	08/02/2017 10:09:53	Endura3
✓▲		07311333, 23, W153_07311333.23, Ch#2-1, CVD 1, TDS ...	\\Inficon\data\Chamber 2\008-02-2017	08/02/2017 10:14:38	Endura3
✓▲		07311333, 24, W153_07311333.24, Ch#2-1, CVD 1, TDS ...	\\Inficon\data\Chamber 2\008-02-2017	08/02/2017 10:19:05	Endura3
✓▲		07311333, 25, W153_07311333.25, Ch#2-1, CVD 1, TDS ...	\\Inficon\data\Chamber 2\008-02-2017	08/02/2017 10:23:42	Endura3

Buttons: Add Run, Add Alerts, Remove, In/Ex-clude, Label, Master Run

Output | Close

# Module Summary

In this module, you have learned:

- Access the Multi Run Viewer from FabGuard Web or FabGuard IPM
- Load Runs manually or from the FabGuard database
- View and filter loaded Runs
- Navigate the Bins tab

# Thank You!

You have completed the  
Viewing Data module!

You may come back and review the  
content of this module at any time.

# Contact Information



If you have any questions about this module, please contact Michael Neel:

[michael.neel@inficon.com](mailto:michael.neel@inficon.com)

617.527.1219