

# Viewing and Processing LC/GC and GC/GC Data with ACD/ChromProcessor and ACD/Matrix

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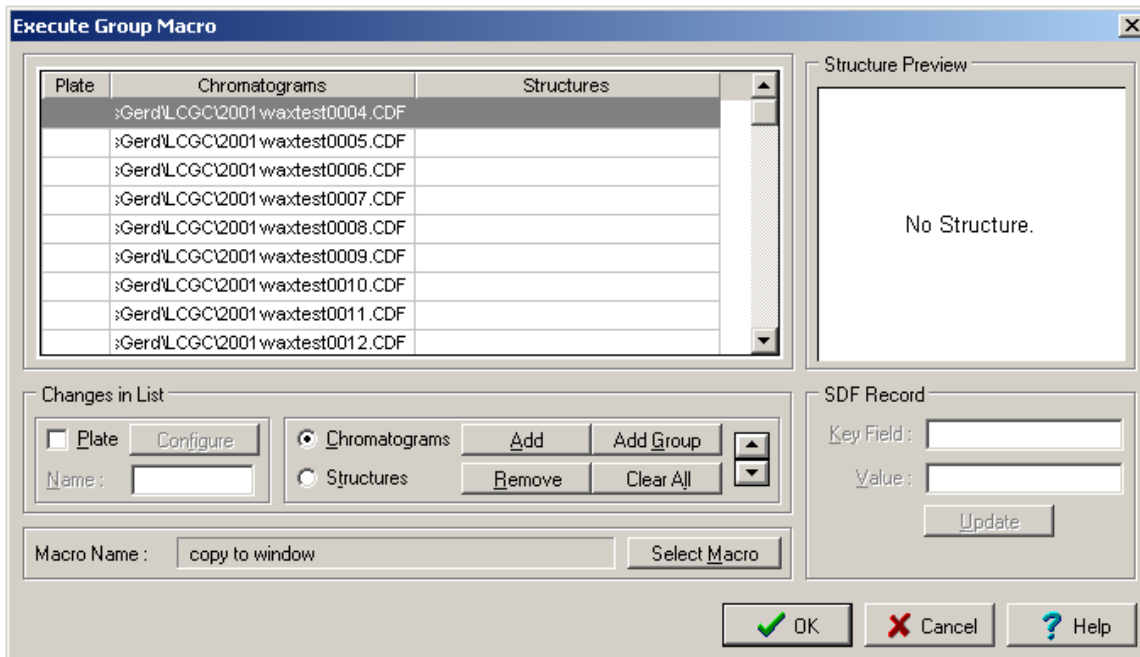
Using ACD/ChromProcessor (or ACD/ChromManager) and the ACD/Matrix tool, it is possible to view and display 2D chromatographic data. Standard processing is done through the ChromProcessor window, as well as saving the file via a series of chromatograms. This technical note will demonstrate how to import, display, and process LC/GC or GC/GC data in ChromProcessor or ChromManager.

## Importing Files into ChromManager or ChromProcessor

Currently, any 2D chromatographic data that can be collected as a series of scans can be treated as a 2D chromatographic dataset. The data is imported through the group macro import tool. To create the macro, follow the steps below.

1. Open ChromManager or ChromProcessor.
2. From the **File** menu, point to **Execute Group Macro**, and choose **CHROM**.
3. In the **Changes in List** section, select **Chromatograms**.
4. Click **Add** (or **Add Group**) to select the file(s) to add to the list.

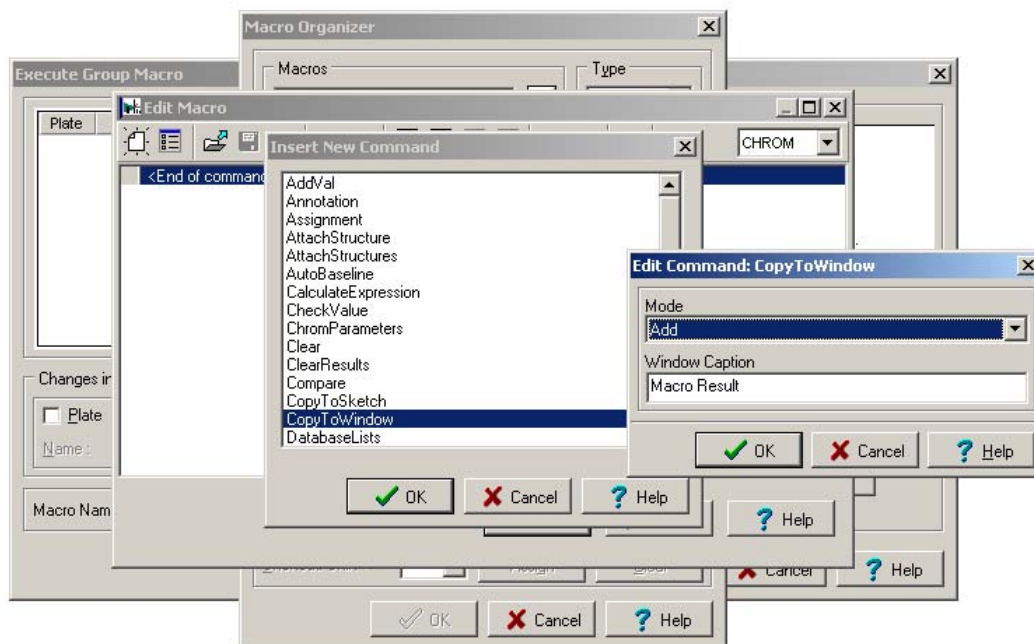
5. Select the .CDF files to import. If required, a set of example data can be found at <http://www.acdlabs.com/appnotes/technotes/chrom.html> with this technical note. This data was made available by kind permission of Unilever.



**Note** Alternatively, you may drag and drop the desired files from Windows Explorer into the **Execute Group Macro** dialog box, or use the **Add Group** button to select a group of files by specifying the folder where the files are located and the filenames with a wild card modifier (e.g. 2001waxtest\*.CDF).

6. Click **Select Macro**.
7. In the **Macro Organizer** dialog box that appears, click **New**.
8. In the **Edit Macro** dialog box, click **Insert Macro Command**.
9. Select **CopyToWindow** from the list and click **OK**.

10. In the **Edit Command: CopyToWindow** dialog box, select **Add** from the drop-down list.

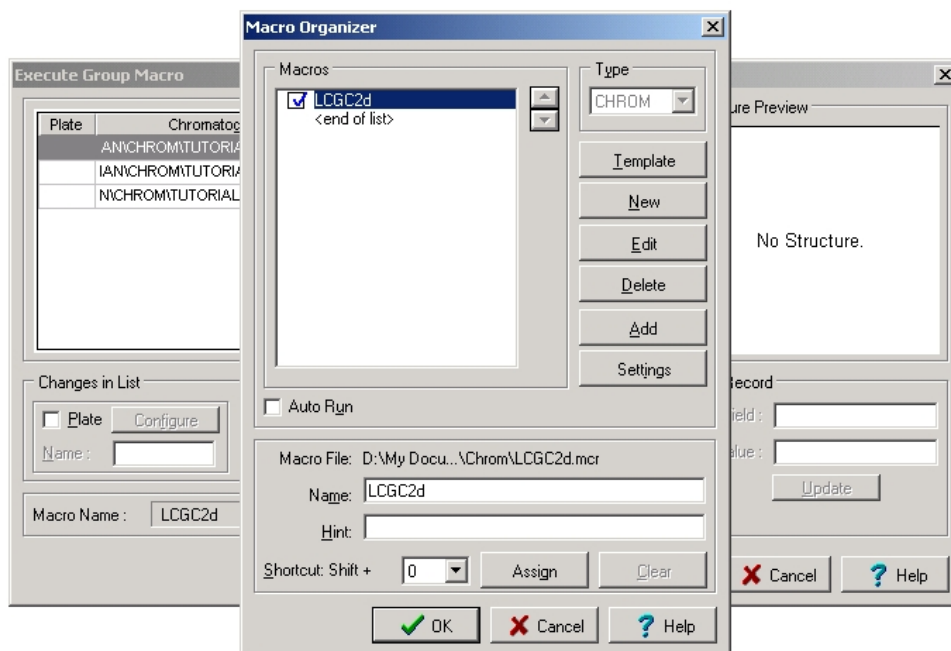


**Note** If processing (such as baseline correction) is not desired, the only command that is needed in the macro is “copy to window” specifying “add mode”.

11. In the **Edit Command** dialog box, click **OK**.
12. In the **Insert New Command** dialog box, click **OK**.
13. **Save** the macro as prompted (LCGC2D.MCR).
14. In the **Edit Macro** dialog box, click **OK**.

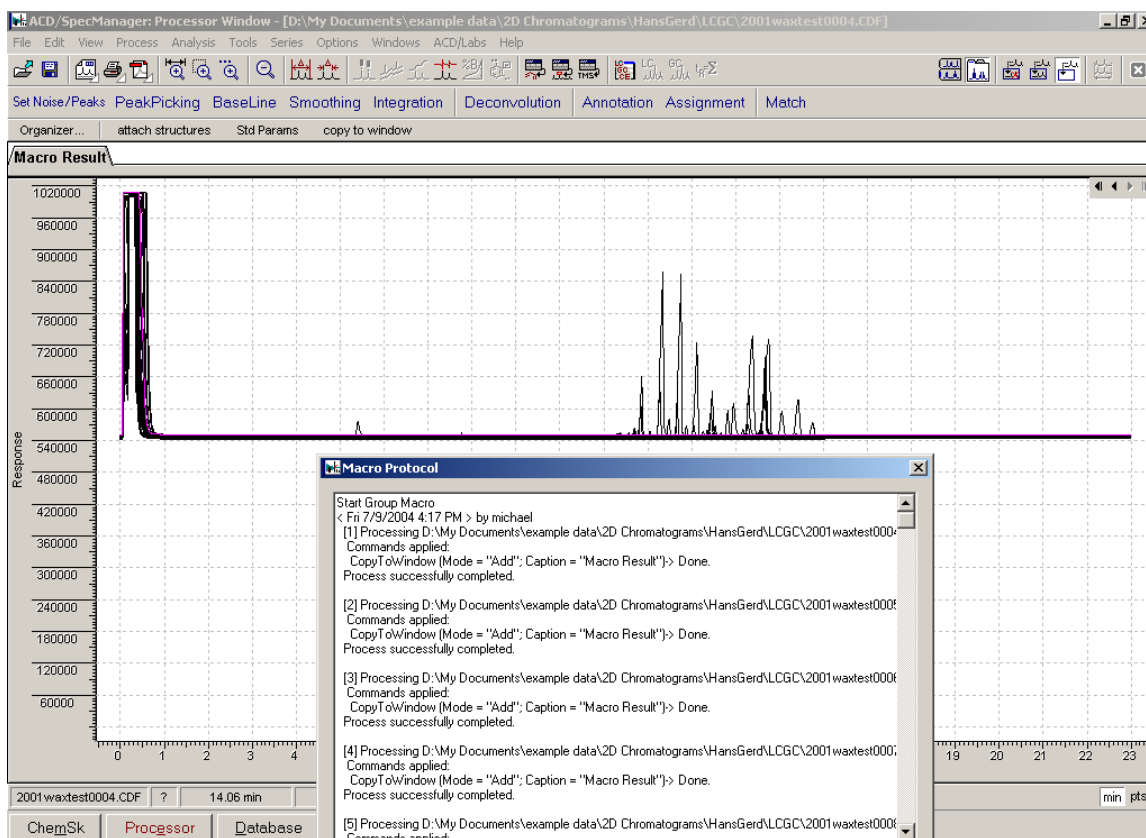
Executing the macro will overlay each of the chromatograms. To execute the macro, follow the steps below.

- In the **Macro Organizer** dialog box, select the macro that was just created, LCGC2d, from the list.



- In the **Macro Organizer** dialog box, click **OK**.
- In the **Execute Group Macro** dialog box, click **OK**.

Executing the macro will display all of the chromatograms in the same window. The following results screen will appear.

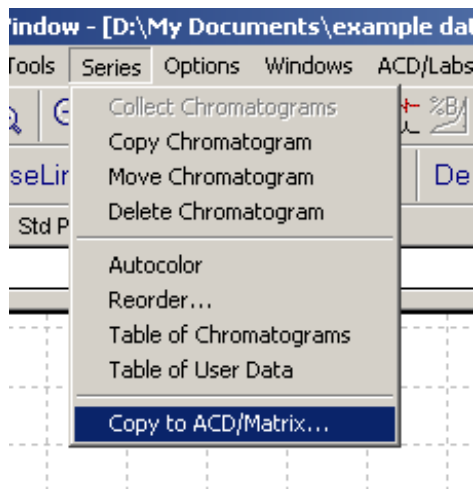


18. In the **Macro Protocol** dialog box, click **OK**.

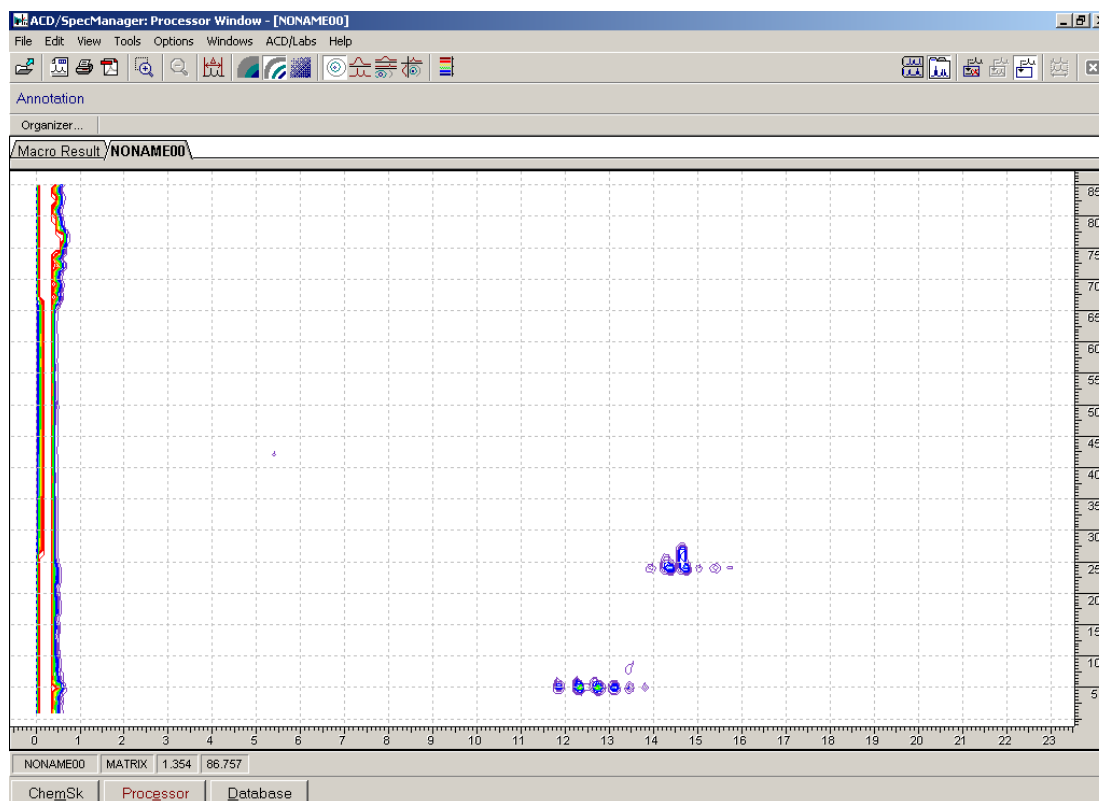
## Viewing 2D Data

In order to display the data in 2D, it is necessary to move the chromatographic series to the Matrix Viewer.

1. From the **Series** menu, choose **Copy to ACD/Matrix**.



The data will be displayed as shown below.

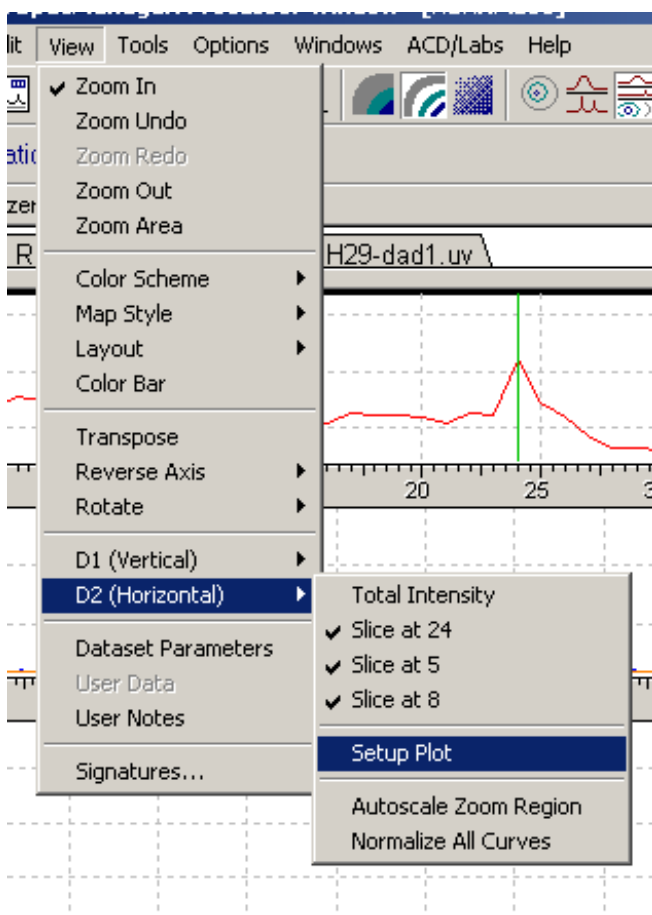


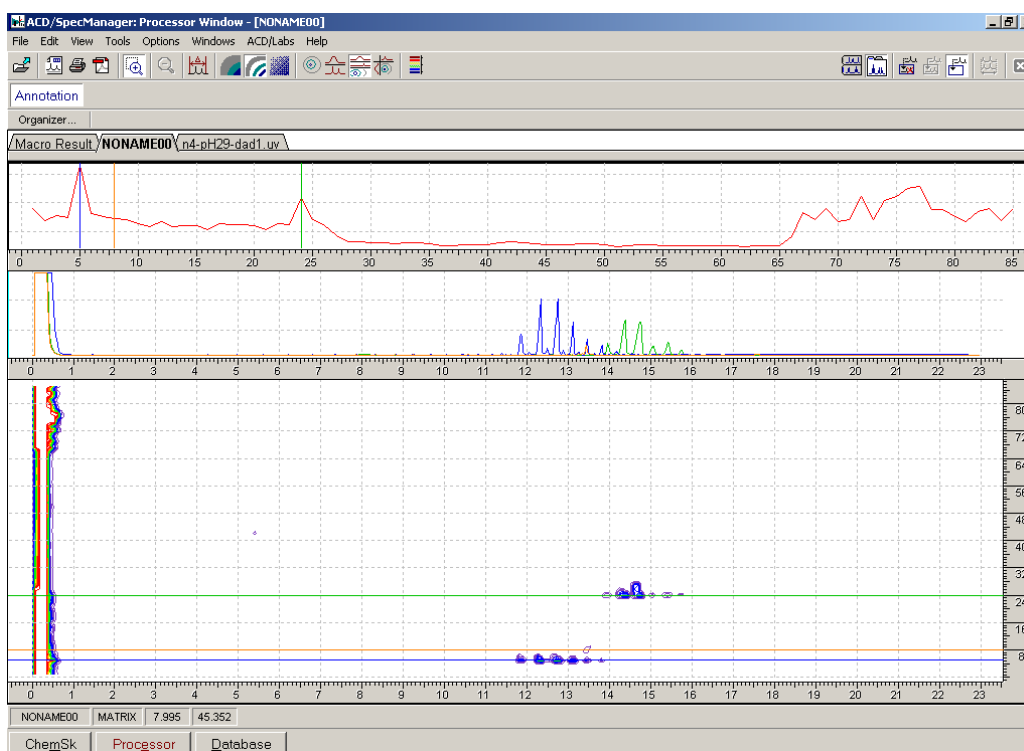
2. Use the buttons on the toolbar  to select how to display the data, including the layout and map style.

**Note** Colors may be further modified; from the **View** menu, choose **Color**, or from the **Options** menu, choose **Preferences**.

## Processing 2D Chromatographic Data

Using the ACD/Matrix tool, it is possible to view and display 2D chromatographic data. To perform integrations, attach structures, etc., you should work with the series data in the ChromProcessor interface. Work is done there on individual chromatograms. If you wish to work with individual slices of the 2D chromatogram, these can be extracted by using the View, D1 or D2, Setup plot tool.





To perform integrations, attach structures, etc., you should work with the series data in the ChromProcessor interface. Work is done there on individual chromatograms. From the **Tools** menu, choose **Copy Plot** to push slices to ChromProcessor.

