## C-VIEW - OFFSETS



This example demonstrates how to correct for scan misalignment and to investigate individual features of a scan.

The data (obviously manufactured), is a valid demonstration of the capability.

In this case we want to compare the area around the Sonomatic logo from the 2 datasets.

## C-Scans in the dataset

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From the Tools Menu select"Line Up C-Scans" and the dialog on the left will appear

- Choose the cscan you want to move
- Choose the cscan you want to use as a reference
- Confirm the other options

It's important to note that all selected C-Scans will be moved, expect for the reference one, this is clear on the final image after moving

When you click on Ok a new semi-transparent copy of the move C-Scan is drawn on top of the reference C-Scan (bottom plot), this can be hard to see in some cases, but it becomes more obvious when you move it

Then left click on the reference axes
 hold down and drag the C-Scan.
In this example you hold and click on the lowest axes.


After dragging the C-Scan and letting go you will have something similar to what is shown on the left.

The final step to compare the data is to isolate the area of interest, in this case it is the logo.
There is two ways to do this as shown below.

C-Scans after aligning areas


Using the "lasso feature", press"q" when over the axis, left click to add points and then finish with a right click.

This will isolate the area for all displayed C-Scans, and you can see the distribution for this area only.
An interesting point to note here is that the distribution shape for dataset 1 is the same shape as the others, this is expected due to the other areas are capturing the full range of the data.

C-Scans after applying the lasso


Another way is to use the "Common Area Only" function from the Tools menu.

This looks at all the datasets and only keeps data where all datasets have readings at common X/Y positions

