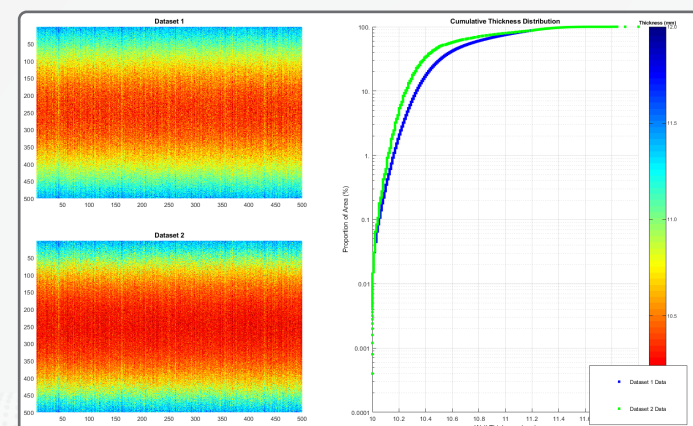
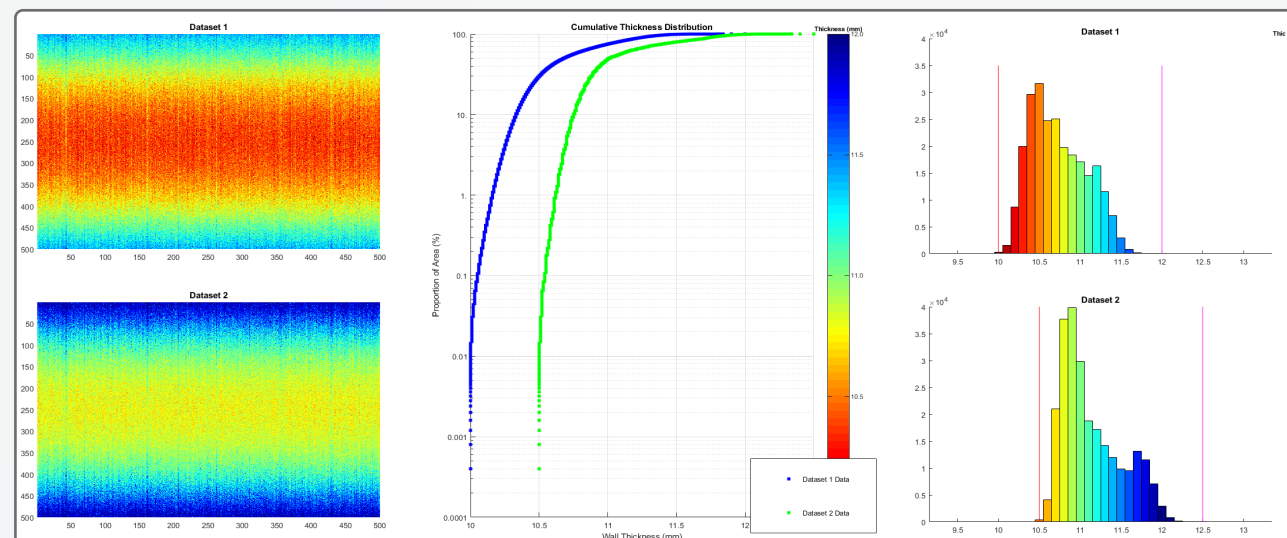
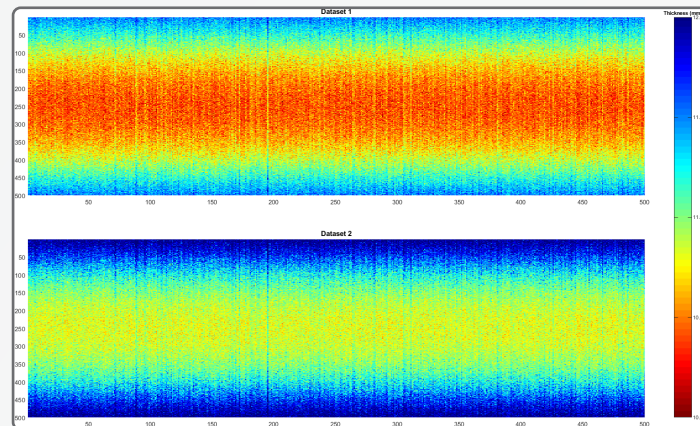


# C~VIEW - 2 DATASETS

This example loads two datasets which have a significant offset from the two inspections, this could be due to several factors, such as calibration or temperature.

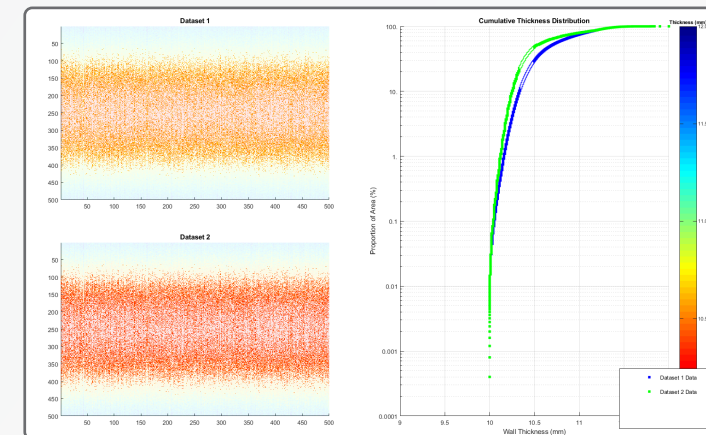
The aim of this example is to demonstrate different ways of analysing data.

This is done by looking at a distribution or a histogram to view the data. Looking at the distribution in the middle, there are areas of uncorroded material so one of the tools you can use is to Align the uncorroded material, this is done by right clicking on the distribution curve and selecting Align at 90%.

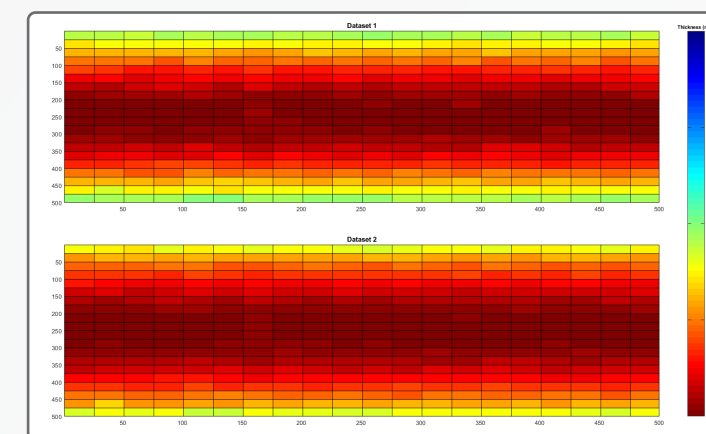


This in effect applies an offset to the data, but a statistically calculated value.

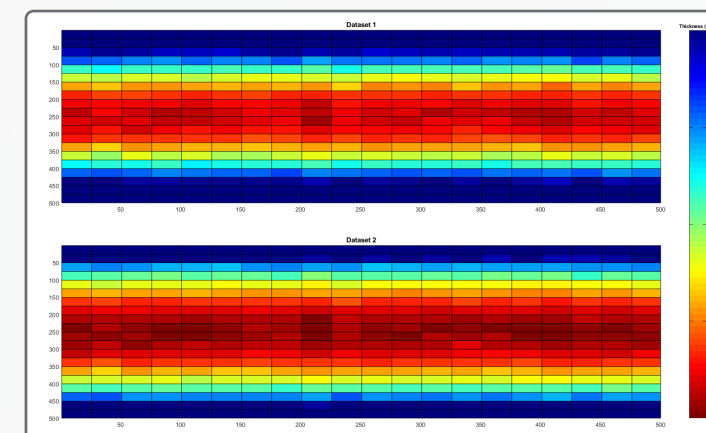
It is clear from the data that there is no change in the absolute minimum between the two inspections; this is a classic way that inspections are reported, however there is a difference in the shape of the distribution, which indicates that there is a change.



Distribution area highlighted



Data gridded 25x25 and plotted by minimum in each grid



Data gridded 25x25 and plotted by 5th percentile in each grid

You can interrogate the distribution to find out where the areas of corrosion are, we do this by:

- Update the Axis limits (on "Dist" Tab)
- Right click on distribution and highlight area
- Select an area (left click to draw points, right click to finish)

The lower plot shows a lot more points which are in the selected thickness range.

Another way to look at the data is to use the "Grid" feature.

There are a number of options to use which show data in different ways, grid by:

- Min
- Median
- Mean
- Percentile

By narrowing the colour bar limits (editing Min Colour and Max Colour on the cScan tab) and selecting to "Grid by Percentile" you can clearly see that the second dataset has a lot more low areas, which is not clear by looking at the minimum values only.