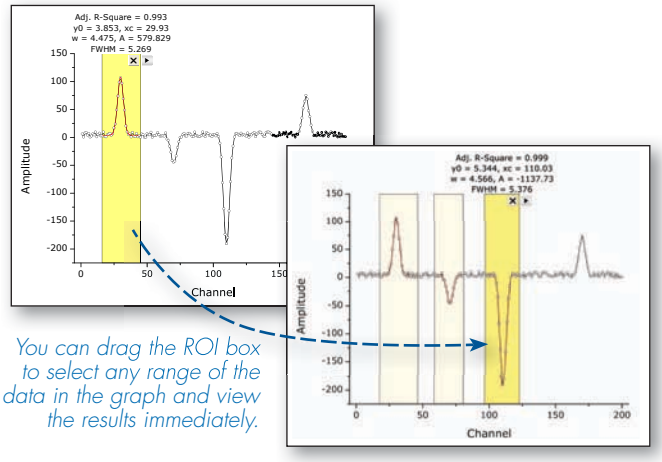
Gadgets

When your data is plotted in a graph, Origin gadgets provide a quick and easy way to perform exploratory analysis on the graph. Perform the analysis on a specific range of the data plot by appropriately positioning a region-of-interest (ROI) object to select the desired range. The ROI object provides a fly-out menu with various options that are tailored to each specific gadget. All gadgets have a fly-out menu with a Preferences option allowing you to customize desired settings.



You can drag the ROI box to select any range of the data in the graph and view the results immediately.

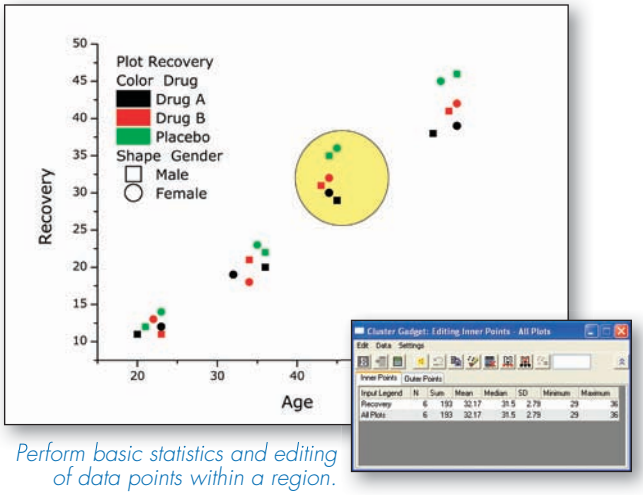
With Origin gadgets you can:

- Select the desired data range for analysis directly from the graph
- Get immediate visual output of results
- View updated results on screen when the ROI is moved or re-sized
- Customize the output, including appending results to a worksheet for each ROI position
- Save settings as a Theme for repeat use

A selection of the gadgets available in Origin and OriginPro are described below. Please see other sections for additional gadgets.

Cluster PRO

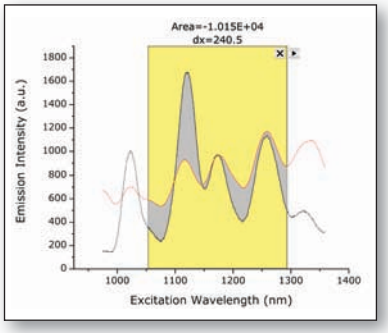
The Cluster Gadget makes it convenient to perform simple statistics on a region of interest (ROI) in a graph. The gadget also allows you to easily edit the data points, such as to clear or mask points. The statistics results are dynamically updated as the ROI object is moved or resized.



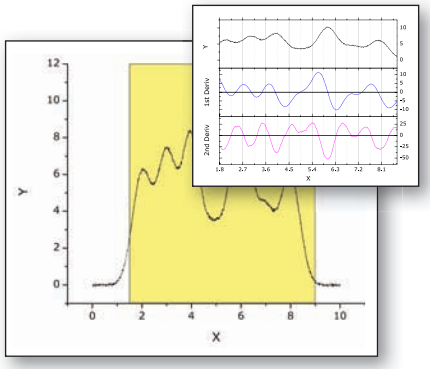
Perform basic statistics and editing of data points within a region.

Integrate, Differentiate, and Interpolate

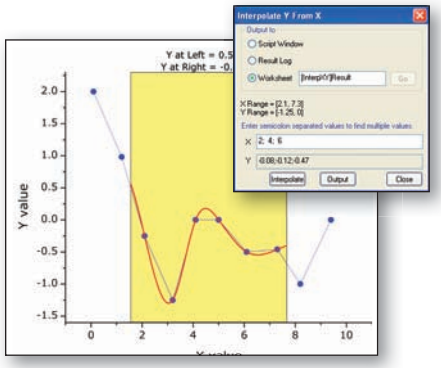
Origin provides three gadgets for the common tasks of integration, differentiation, and interpolation of your data.



Integrate Gadget
Simplifies peak area calculations.



Differentiate Gadget
Lets you specify the desired derivative order and view the result in a separate graph.



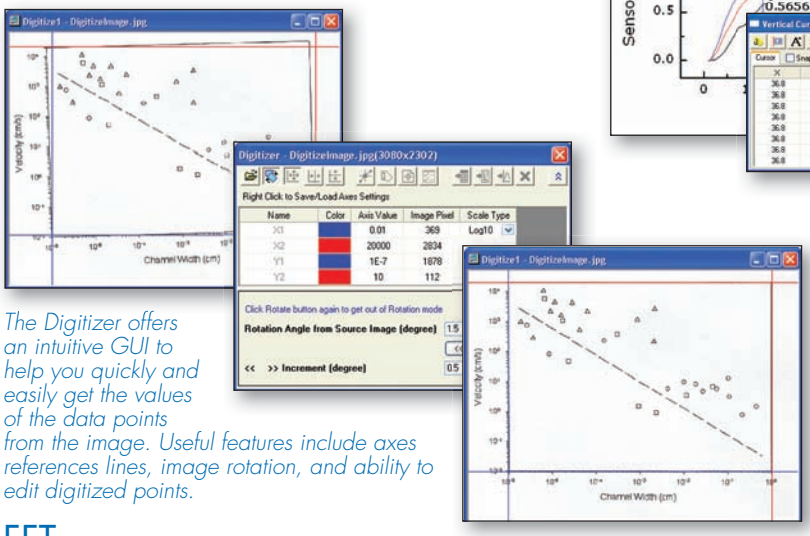
Interpolate Gadget
Allows easy up-or-down sampling of existing data and finding desired X/Y values.

Digitizer

The Digitizer Gadget can easily digitize images of graphs such as photocopied, faxed, or scanned images. Easily define coordinate values for the axes, and digitize multiple data curves to create an Origin worksheet and graph.

With this gadget you can:

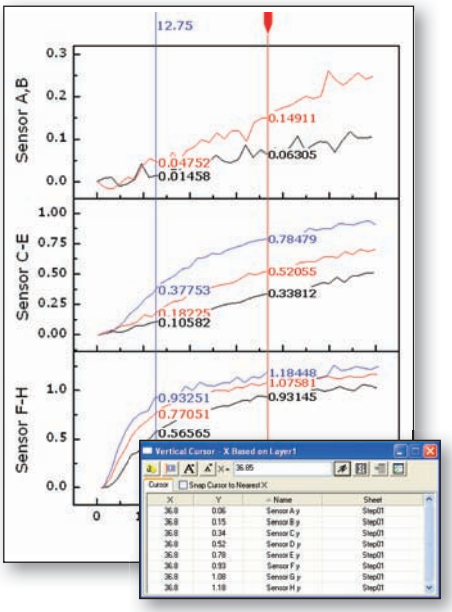
- Digitize an image using an intuitive GUI
- Rotate image
- Define X, Y axes coordinates using movable line
- Use vertical and horizontal reference lines to check accuracy of axes coordinates
- Digitize multiple traces creating multiple data sets
- Add labels for data points



The Digitizer offers an intuitive GUI to help you quickly and easily get the values of the data points from the image. Useful features include axes references lines, image rotation, and ability to edit digitized points.

Vertical Cursor

The Vertical Cursor Gadget provides an intuitive way to read X and Y coordinate values for data points on stacked panel plots.



With this gadget you can:

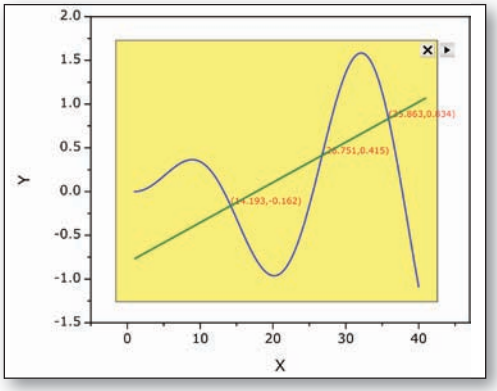
- Drag by the handle, or enter an X value in the dialog, to place on the reference layer.
- Tag crossing points on a graph and output the XY values to a worksheet.
- Add multiple tags on a graph, labeling each with a unique name.
- Select the plots for which to show labels.
- Snap to the nearest data point in the X direction.

Intersection

The Intersection Gadget gives you an intuitive and interactive way to calculate the intersection points of the input curves in the ROI.

With the intersection gadget you can:

- Find intersection points for more than two curves
- Tag intersection points with symbols and XY values
- Output the XY values of intersection points to a worksheet
- Change input to show intersection points on different curves
- Interpolate the input curves with a specified number of sampling



FFT

The FFT Gadget provides a simple and quick way to examine the frequency spectrum of data plotted in a graph. The frequency spectrum is displayed in a separate preview graph window, and is dynamically updated as the ROI object is moved or resized.

The Amplitude axis scale of the FFT result graph can be switched between linear and log scales.