Module: English Year: 2021-2022

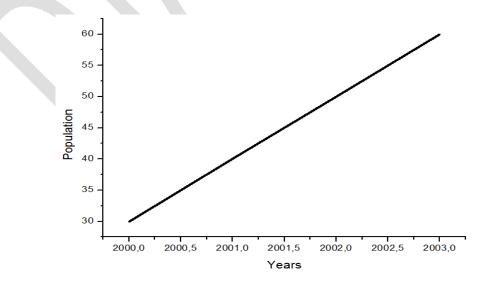
Origin, a statistic graphing software

Definition of Origin

- Origin is the data analysis and graphing software of choice for over half a million scientists and engineers in commercial industries, academia, and government laboratories worldwide.
- Origin offers an easy-to-use interface for beginners, combined with the ability to perform advanced customization as you become more familiar with the application.

Graphing

- Origin graphs and analysis results can automatically update on data or parameter change, allowing you to create templates for repetitive tasks or to perform batch operations from the user interface, without the need for programming
- > Origin makes it easy to create and customize publication-quality graphs.
- You can add additional axes and panels, add, remove plots, etc. to suit your needs.
- Batch plot new graphs with similar data structure, or save the customized graph as graph template or save customized elements as graph themes for future use.



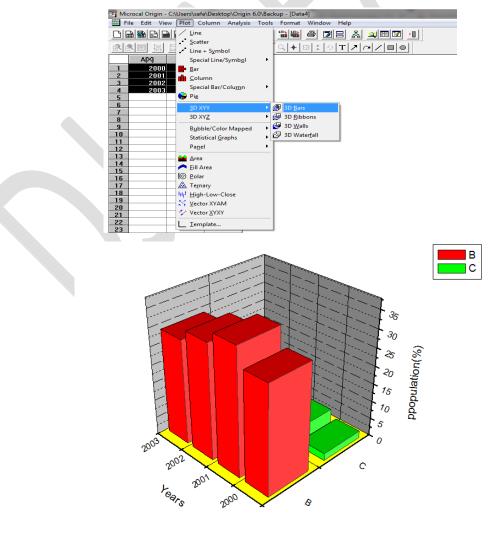
Graph Types Column & Bar Charts: Basic, Stacked, Grouped

- Floating Column & Bar Charts
- Bridge Plot
- ➢ 2D Pie and Doughnut Chart
- ➢ Line Plot
- Scatter Plot (with X,Y Error Bar, Column Scatter, Drop Lines, Color Map, Size Map)
- Line + Symbol Plot.....

Multiple Axes and Panels

It is a Multi-axis and Multi-panel Templates

- Built-in multi-axis and multi-panel templates, such as Double Y, Multiple-Y, 4-Panel, Vertical and Horizontal Stack Panels
- > Create your own multi-axes or multi-layer graphs and save as template for repeat use



Grouped Data Plot

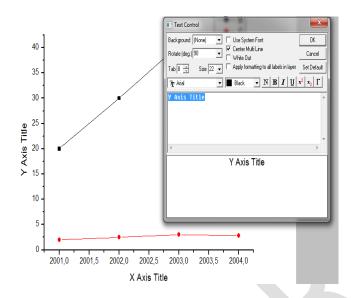
- Using grouped data, you can easily create multi-panelled graphs in Origin with a single click on the plot menu
- □ Cluster Plot (Line, Scatter and Column)
- Grouped Box Plot
- Grouped Column/Scatter Plot
- □ Various Types of Trellis Plots
- \Box > Scatter
- □ Line and Symbol
- \square > Bridge Chart
- □ Flexible configuration and customization options include
- □ Control the style increments between or within the groups
- □ Customize the gap between, or within the groups.
- U Wrap panels
- Overlap panels
- □ Uniform or Independent X/Y Scale

Data Labels

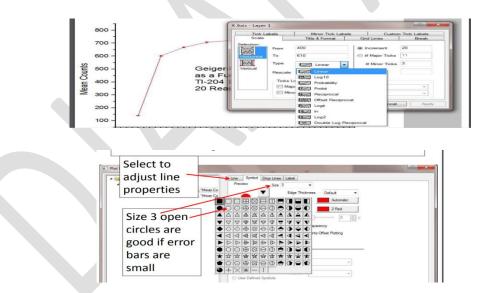
Add data labeling to plot or a single point

Label as x, y coordinates, row indexing, column metadata or data/text from other columns

Auto-positioning of labels to avoid overlapping



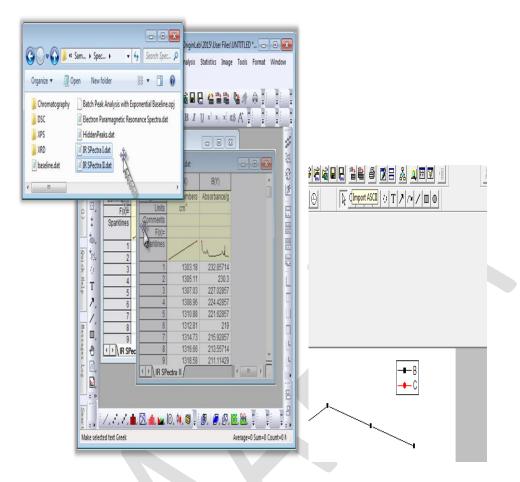
- > Independent control axis line, major ticks and minor ticks.
- Additional axis line at any position to be used as baseline for column/bar plots and drop lines
- > Option to show axis and grids on top of data



Impressive Import Speed for Large Data

- > Importing large text files is easy and fast in Origin.
- > Import speed in Origin is a factor of 10 or more compared to Excel 2016
- The gain in speed has been achieved by making full use of the processor's multi-core architecture

> Origin supports more than 30 data formats including: ASCII, EXCEL,



Advantages of Origin

- Data analyses in Origin include <u>statistics</u>, <u>signal processing</u>, <u>curve fitting</u> and peak analysis.
- Origin Pro allows us to graph and plot scientific data, run data analysis and statistical tests in a single software. The customization of functions and easy export options allows us to integrate Origin Pro into workflows. Origin Pro is a critical asset for Research and Higher Education industry.
- Origin Pro is one of the most feature rich graphing software out there. The ease of use, extensive set of graphing and data analysis options and the ability to set custom functions and plots sets this software much ahead of others

Conclusion

So; You can create and modify templates by your own and add to the collection.

- Creating a graph in Origin is as simple as selecting the desired data and then selecting a template from a menu or from the graphing toolbars.
- > The **Plot Setup** dialog offers more flexibility in creating plots,
- > such as plotting data from multiple books or sheets.
- Starting with Origin 2016, a more powerful "cloneable" template has been added.

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