

Key Features

Use the following tables to check what new features have been added to Origin, compared to your version.

| ORIGIN INTERFACE | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
|--|-----|---|-----|------|-----|---|-----|
| Smart Hint and Smart Hints Log | ✓ | | | | | | |
| Save Project without Data, Duplicate Workbook or Project without Data | ✓ | | | | | | |
| Plot: User Defined: Menu to Access Customized Templates | ✓ | | | | | | |
| File: menu change: Moved Recent Import and Re-Import related Menus below Import menu | ✓ | | | | | | |
| Sparkline Improvements (Histogram and Box chart as Sparkline, Log10 X and Y support) | ✓ | | | | | | |
| Worksheet Long Name with Special Characters | ✓ | | | | | | |
| Worksheet Protection | ✓ | | | | | | |
| Add Graphs and Notes as Sheet | ✓ | | | | | | |
| Add Multiple Graphs to Layout Together | ✓ | | | | | | |
| Linear Referencing (LRS) Numeric Display | ✓ | | | | | | |
| Floating Graphs: Easier Placement of Graphs on Worksheet for creating Reports | ✓ | ✓ | | | | | |
| Display Statistics on Status Bar for Selected Cells | ✓ | ✓ | ✓ | | | | |
| Improved Data Info Window | ✓ | ✓ | | | | | |
| Support Left/Right Split of Project Explorer | ✓ | ✓ | | | | | |
| Easily Add or Remove Buttons from Toolbars | ✓ | ✓ | | | | | |
| Shift+Alt+3 to Toggle the Script Window | ✓ | ✓ | | | | | |
| Pause Update of Operation Output by Ctrl+Shift+P | ✓ | ✓ | | | | | |
| Native 64-Bit and 32-Bit Application | ✓ | ✓ | ✓ | | | | |
| Auto-Hide Project Explorer Window and Other Dockable Windows | ✓ | ✓ | ✓ | | | | |
| New Message Log Window | ✓ | ✓ | ✓ | | | | |
| Zoom and Pan Inside Graph Layer Using Keyboard or Mouse | ✓ | ✓ | ✓ | | | | |
| Navigate Worksheets Dialog to Manage Worksheets in Workbook | ✓ | ✓ | ✓ | | | | |
| Horizontal and Vertical Dividers to Split Worksheet | ✓ | ✓ | ✓ | ✓ | | | |
| Zoom and Pan on Graphs, Worksheets, Matrices and Layouts | ✓ | ✓ | ✓ | ✓ | | | |
| Embed and Edit Microsoft Word, Excel and Equation Objects Inside Graphs and Layouts | ✓ | ✓ | ✓ | ✓ | | | |
| Customizable Data Info Display Window | ✓ | ✓ | ✓ | ✓ | | | |
| Thumbnail and Metadata Support for Matrix | ✓ | ✓ | ✓ | ✓ | | | |
| Password Protection for Project, and Audit Log of Project Save with Optional Password Protection | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Insert Graph into Worksheet Cells | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |

* is for Origin 8.5 and 8.5.1

| GRAPH TYPES | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
|---|-----|---|-----|------|-----|---|-----|
| Grouped Column Plots | ✓ | | | | | | |
| Grouped Box Chart | ✓ | | | | | | |
| Variable Column/Bar Width | ✓ | | | | | | |
| 100% Stacked Column/Bar Plots | ✓ | | | | | | |
| 3D OpenGL Waterfall | ✓ | | | | | | |
| 3D Ternary Surface | ✓ | | | | | | |
| Piper/Trilinear Diagram | ✓ | | | | | | |
| Marginal Histogram/Box Chart | ✓ | | | | | | |
| Plot 3D or Contour from Virtual Matrix with Text X and Y values | ✓ | | | | | | |
| 3D OpenGL Graphs and Function Plots with Fast Rotation | ✓ | ✓ | | | | | |
| 3D Surface/Bar Plot From Worksheet XYZ Columns | ✓ | ✓ | | | | | |
| 3D Parametric Function Plot | ✓ | ✓ | | | | | |
| 3D Bar Plot with Z Error Bars | ✓ | ✓ | | | | | |
| 3D Scatter with Projections and Error Bars in X,Y, and Z Directions | ✓ | ✓ | | | | | |
| Scatter Matrix Improvement: Group Data Points, Insert Box Plot/Histogram in Diagonal Cells | ✓ | ✓ | | | | | |
| Support Special Point for 3D Scatter Graph | ✓ | ✓ | | | | | |
| Improved Polar Graph to Support Negative Numbers/Radius | ✓ | ✓ | | | | | |
| Improved Pareto Chart to Combine Smaller Values | ✓ | ✓ | | | | | |
| Radar/Spider Chart | ✓ | ✓ | ✓ | | | | |
| 2D/3D Function Plot and 2D Parametric Function Plot | ✓ | ✓ | ✓ | | | | |
| Error Bar Improvement: Error Bar as Line, as Arc in Polar Graph, Option to Skip Error Bar, etc. | ✓ | ✓ | ✓ | ✓ | | | |
| Contour Profile Plot from Worksheet Data with Uneven Spacing (Virtual Matrix or XYZ Columns) | ✓ | ✓ | ✓ | ✓ | | | |
| 3D Vector Plot | ✓ | ✓ | ✓ | ✓ | | | |
| 3D Error Bar Plot | ✓ | ✓ | ✓ | ✓ | | | |
| Contour or 3D Plot from Worksheet Data (Virtual Matrix) | ✓ | ✓ | ✓ | ✓ | | | |
| Stock Charts: OHLC-Volume Chart and Japanese Candlestick | ✓ | ✓ | ✓ | ✓ | | | |
| Ternary Contour Plot | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Probability Plot and Q-Q Plot | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Polar Contour Plot | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Image and Contour Profile Plot from Matrix Data | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

| GRAPH CUSTOMIZATION | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
|--|-----|---|-----|------|-----|---|-----|
| Smart Labels - Auto Position of Data Labels and Leader Lines | ✓ | | | | | | |
| User Defined Axis Scale Type | ✓ | | | | | | |
| Multiple Axis Breaks and Axis Break with No Gap | ✓ | | | | | | |
| Multiple Special Ticks | ✓ | | | | | | |
| Tick Label Table | ✓ | | | | | | |
| Anti-Aliasing on Screen for 2D Graphs | ✓ | | | | | | |
| Batch Plotting - Duplicate Graphs by Using Data from Different Sheets | ✓ | | | | | | |
| Box Chart Improvements: Outliers in Line, Data on Top of Box, Box Width/Position by Variable | ✓ | | | | | | |
| Improved Polar Plot with more Azimuth and Radial Axis Controls | ✓ | | | | | | |
| Fill Area Between Two Line Plots | ✓ | | | | | | |
| Customized Color/Shape/Interior Increment List for plot | ✓ | | | | | | |
| Isometric - Link Axis Length to Scale | ✓ | | | | | | |
| Akima and Modified Bezier Line Connection | ✓ | | | | | | |
| Data Labeling for 3D Bars | ✓ | | | | | | |
| Colormapped Contour Lines | ✓ | | | | | | |
| Edit Range and Axis Breaks support in 3D Graph | ✓ | | | | | | |
| Merge Graphs: Treat Each Source Graph as a Unit and Add Labels | ✓ | | | | | | |
| Manually Move 3D Planes Along the Axis Direction | ✓ | ✓ | | | | | |
| Flatten and/or Shift 3D Surface in Z Direction by Percent of Scale Range | ✓ | ✓ | | | | | |
| Intersecting Surface from different X or Y | ✓ | ✓ | | | | | |

| GRAPH CUSTOMIZATION | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
|--|-----|---|-----|------|-----|---|-----|
| 3D Surface Improvements: Lighting Effect, Mesh | ✓ | ✓ | | | | | |
| Move, Rotate and Resize 3D Graphs in an intuitive way | ✓ | ✓ | | | | | |
| Legend Improvement: Combination of Substitution Notations and Hide/Show Data Plot Directly | ✓ | ✓ | | | | | |
| Use the Context Menu to Quickly Change the X/Y Data for 2D Data Plots | ✓ | ✓ | | | | | |
| Support Clockwise/Counter Clockwise Ternary Plots | ✓ | ✓ | | | | | |
| Order Stacked Columns/Bars in Stacked Column/Bar Plot | ✓ | ✓ | | | | | |
| New Axis Dialog for 3D Graphs | ✓ | ✓ | | | | | |
| Add Vertical or Horizontal Lines with Labels in 2D Graph Layers | ✓ | ✓ | | | | | |
| "Insert Info Variable" Supports Plot Index | ✓ | ✓ | | | | | |
| More Label Options for Annotation Tool | ✓ | ✓ | | | | | |
| Scale Distribution Curve for Histogram Plot, as % of Tallest Bar | ✓ | ✓ | ✓ | | | | |
| Output Distribution Curve Data and Parameters to Bin Worksheet for Histogram Plot | ✓ | ✓ | ✓ | | | | |
| New Layer Contents Dialog | ✓ | ✓ | ✓ | ✓ | | | |
| Axis Tick Locations from Dataset | ✓ | ✓ | ✓ | ✓ | | | |
| Color Palette Improvements | ✓ | ✓ | ✓ | ✓ | | | |
| Legend Improvements | ✓ | ✓ | ✓ | ✓ | | | |
| Support for Nonlinear X and Y Axes, such as Log Axes, for 3D Surface and Contour Plots | ✓ | ✓ | ✓ | ✓ | | | |
| Transparency and Gradient Fill Control for Graph Objects | ✓ | ✓ | ✓ | ✓ | | | |
| Non-Linear Z-Axis and Y- and Z-Value Colormap Support for Waterfall Plots | ✓ | ✓ | ✓ | ✓ | | | |
| Ternary Plot with Flexible Scale | ✓ | ✓ | ✓ | ✓ | | | |
| Multiple Intersecting Surfaces in 3D Graphs | ✓ | ✓ | ✓ | ✓ | | | |

| GADGETS | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
|---|-----|-----|-----|------|-----|---|-----|
| 2D Integration Gadget | PRO | | | | | | |
| Global Vertical Cursor Gadget Across Graphs | ✓ | ✓ | | | | | |
| Vertical Cursor Gadget | ✓ | ✓ | ✓ | | | | |
| Intersect Gadget | ✓ | ✓ | ✓ | | | | |
| Quick Sigmoidal Fit Gadget | ✓ | ✓ | ✓ | | | | |
| Cluster Gadget | PRO | PRO | PRO | PRO | | | |
| Quick Peaks Gadget | ✓ | ✓ | ✓ | ✓ | | | |
| Statistics Gadget Improvement | ✓ | ✓ | ✓ | ✓ | | | |
| Differentiate Gadget | ✓ | ✓ | ✓ | ✓ | | | |
| Interpolate Gadget | ✓ | ✓ | ✓ | ✓ | | | |
| Quick Fit Gadget | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Rise Time Gadget | PRO | PRO | PRO | PRO | PRO | | |
| Integrate Gadget | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| FFT Gadget | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Statistics Gadget | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| IMPORTING | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
| Importing OPJ | ✓ | | | | | | |
| Import MAT File Structure | ✓ | | | | | | |
| Import SPC file in 64-bit | ✓ | | | | | | |
| Transpose Data and Skip Columns in ASCII Import | ✓ | | | | | | |
| Specify Channel When Importing MDF, NITDM, DIADem, Prism, pClamp, Matlab data files | ✓ | ✓ | | | | | |
| File Import Menu Customization Dialog | ✓ | ✓ | ✓ | | | | |
| Digitizer Tool | ✓ | ✓ | ✓ | ✓ | | | |
| SQL Editor for Database Import | ✓ | ✓ | ✓ | ✓ | | | |
| Import Multiple Images into the Same Matrix Sheet | ✓ | ✓ | ✓ | ✓ | | | |
| Import Data in Unicode ASCII, CDF, and HDF5 Formats | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Import Excel, Multi-Line CSV and Binary 2D Array | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 3rd Party Formats Support for pCLAMP 2.0, NI DIADem/TDM, ETAS MDF, JCAMP-DX, NetCDF, etc. | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Graphically Construct SQL Queries | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| ASCII and Binary Import Wizard Provides Visual Feedback during Import | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Drag-and-Drop Data File from Windows Explorer into Origin | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

| EXPORTING | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
|---|-----|-----|-----|------|-----|---|-----|
| Send Graphs to a Specified Powerpoint Template/File | ✓ | | | | | | |
| Creating Movies from Origin Windows using GUI Tool or Script | ✓ | ✓ | | | | | |
| Graph Export Supports Transparency for PDF and EPS Format | ✓ | ✓ | ✓ | ✓ | | | |
| Export All Graphs to PowerPoint | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Export Worksheet as Multi-Page PDF Document | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Export ASCII Data to Existing File by Appending or Replacing | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Slide Show Graphs and Layouts | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Export Worksheet as Image File | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Export Workbook as NI TDM/TDMS File | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Export Worksheet as Wave File | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Graph Export Formats Include: AI, CGM, EPS, TIFF, PDF, JPEG, EMF, PSD, etc. | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Export Image to Raster File Format | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| DATA MANIPULATION | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
| F(x) Column Label row for Formula | ✓ | | | | | | |
| Set Multiple Column Values | ✓ | | | | | | |
| Sort Column by Values in Column Label Rows | ✓ | | | | | | |
| Reduce Columns | ✓ | | | | | | |
| Generate Patterned Data | ✓ | | | | | | |
| Lock Filter Condition in Copied Columns from Worksheet with Filter | ✓ | | | | | | |
| Data Filter: Easy and Quick Tool for Data Reduction | ✓ | ✓ | | | | | |
| Split a Worksheet into Multiple Worksheets by Number of Columns/ Rows, or by Column Label | ✓ | ✓ | ✓ | | | | |
| Pivot Table Improvements | ✓ | ✓ | ✓ | ✓ | | | |
| Stack Columns and Unstack Columns Improvements | ✓ | ✓ | ✓ | ✓ | | | |
| XYZ Gridding in Logarithmic Scale | ✓ | ✓ | ✓ | ✓ | | | |
| Reduce XY Data by Group, Reduce Data to Evenly Spaced X | PRO | PRO | PRO | PRO | PRO | | |
| Reduce Duplicate X Data, Reduce Data by Skipping Every N Points | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| New Find and Replace Tool for Numeric and Text Values | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Trim Missing Values in Worksheet | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Convert Table-Like Data into XYZ Columns | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Worksheet Query (Extract Values from Worksheet) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |

| GENERAL ANALYSIS | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
|---|-----|-----|-----|------|-----|---|-----|
| Copy & Paste Operation for Fitting Tools | ✓ | | | | | | |
| Copy & Paste Formula between Columns | ✓ | | | | | | |
| Gadgets: Batch Analysis | ✓ | | | | | | |
| Set Numeric Settings for Report | ✓ | | | | | | |
| Analysis on Virtual Matrix based Plot | ✓ | | | | | | |
| Support Data With Y Error in Batch Processing | ✓ | ✓ | | | | | |
| User Defined Data Identifier in Report Sheets | ✓ | ✓ | | | | | |
| Repeat Analysis on All Plots in Graph or All Columns in Worksheet | ✓ | ✓ | ✓ | | | | |
| Batch Processing with Summary Report Using Analysis Templates™ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Batch Peak Fitting of Multiple Datasets Using Peak Analyzer Theme | PRO | PRO | PRO | PRO | PRO | | |
| Generate LabTalk Script Command from Current Dialog Settings | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Compare Settings in Two Themes and List Differences | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Analysis Templates™ with Custom Report Sheets for Repeat Analysis | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Consolidated Reports with Collapsible Tables | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Theme Support for Saving Dialog Settings | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Recalculation of Results on Data or Parameter Change | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Customize Graphs in Report Sheet | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Run Analysis with Theme Settings Without Opening Dialog | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |

| CURVE FITTING | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
|---|-----|-----|-----|------|-----|-----|-----|
| Fit and Rank All Functions in a Category | PRO | | | | | | |
| Custom X Values for Fitted Curve | ✓ | | | | | | |
| Orthogonal Regression for Explicit Functions | PRO | ✓ | | | | | |
| BIC Test for Model Comparison | PRO | ✓ | | | | | |
| Orthogonal Regression for Implicit Functions | PRO | PRO | | | | | |
| Support Confidence Interval for Find-X/Find-Y Tool | ✓ | ✓ | | | | | |
| Nonlinear Fit with Integral Function | ✓ | ✓ | ✓ | | | | |
| dependent Fit Improvements | ✓ | ✓ | ✓ | | | | |
| Calculate Standard Error for Derived Parameter | ✓ | ✓ | ✓ | | | | |
| Linear Fit with Support for X Error | PRO | PRO | PRO | | | | |
| Surface Fit with Multiple Peaks | PRO | PRO | PRO | PRO | | | |
| New Fitting Function Builder for Fitting Function Creation | ✓ | ✓ | ✓ | ✓ | | | |
| Rotated 2D Gaussian Function for 2D Surface Fitting | PRO | PRO | PRO | PRO | PRO | | |
| Partial Leverage Plot in Multiple Regression | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Improved Residuals Analysis with Additional Residuals Plots | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Improved Find-X/Find-Y Tool for Linear, Polynomial, and Nonlinear Fit | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| New Find-Z Tool for Nonlinear Surface/Matrix Fit | PRO | PRO | PRO | PRO | PRO | | |
| Fitting Comparison | PRO | PRO | PRO | PRO | PRO | PRO | PRO |

| PEAK ANALYSIS | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
|---|-----|-----|-----|------|-----|-----|-----|
| More Baseline modes in Peak Analyzer: Straight Line, Use Script and Use Existing Dataset | ✓ | | | | | | |
| Add More Baseline and Peak Finding Methods | ✓ | ✓ | ✓ | | | | |
| Multiple Peak Fit Tool Improvements | ✓ | ✓ | ✓ | ✓ | | | |
| Improved Peak Analyzer Wizard | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Batch Peak Fitting | PRO | PRO | PRO | PRO | PRO | | |
| Peak Analyzer: Fit Individual Peaks with Different Fitting Functions | PRO | PRO | PRO | PRO | PRO | PRO | |
| Peak Analyzer: Fit Baseline with Peaks | PRO | PRO | PRO | PRO | PRO | PRO | |
| Peak Analyzer: Peak Fitting | PRO | PRO | PRO | PRO | PRO | PRO | |
| Peak Analyzer: Peak Integration | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Peak Analyzer: Peak Finding | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Peak Analyzer: Baseline Subtraction | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Peak Analyzer: Baseline Detection | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| SIGNAL PROCESSING | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
| LOWESS and LOESS Smoothing | ✓ | | | | | | |
| IIR Filter Design | PRO | PRO | | | | | |
| 2D FFT Filter | PRO | PRO | PRO | PRO | | | |
| Signal Envelope | PRO | PRO | PRO | PRO | PRO | | |
| Signal Decimation to Reduce/Resample Data | PRO | PRO | PRO | PRO | PRO | | |
| Coherence | PRO | PRO | PRO | PRO | PRO | | |
| 1D FFT, Inverse FFT and 1D FFT Filter | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 2D FFT and 2D Inverse FFT | PRO | PRO | PRO | PRO | PRO | PRO | |
| Short-Time Fourier Transform (STFT) | PRO | PRO | PRO | PRO | PRO | PRO | |
| Wavelet Analysis: 1D and 2D Decompose, 1D and 2D Reconstruction, Smooth, De-Noise, and Continuous Wavelet Transform | PRO | PRO | PRO | PRO | PRO | PRO | |
| Hilbert Transform | PRO | PRO | PRO | PRO | PRO | PRO | |
| 2D Correlation | PRO | PRO | PRO | PRO | PRO | PRO | |

| STATISTICS | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
|---|-----|-----|-----|------|-----|-----|-----|
| Partial Least Squares Regression | PRO | | | | | | |
| One/Two-Proportion Testing | PRO | | | | | | |
| More Power & Sample Size Tests(One/Two-Proportion, One/Two Variance) | PRO | | | | | | |
| Weibull Fit: Show Probability Plot with Confidence Limits | PRO | PRO | | | | | |
| More Distance Measures for Hierarchical Cluster Analysis | PRO | | | | | | |
| Grubbs Test and Q-test to Detect Outliers | ✓ | ✓ | | | | | |
| Multivariate Analysis: Principal Component Analysis, Cluster Analysis, Discriminant Analysis, Canonical Discriminant Analysis | PRO | PRO | PRO | | | | |
| Raw and Indexed Data Support for More Statistics Tools | ✓ | ✓ | ✓ | | | | |
| Cutoff Value and Test Direction are Added for ROC Curve | PRO | PRO | PRO | | | | |
| More Normality Test Methods: Anderson-Darling, D'Agostino-K Squared, and Chen-Shapiro | ✓ | ✓ | ✓ | | | | |
| Significance Level Support for Most of the Statistics Tools | PRO | PRO | PRO | PRO | | | |
| Support for Periodic Data in 2D Binning | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Survival Analysis: Kaplan-Meier Estimator, Cox Proportional Hazard Model, Weibull Fit, Test Equality of Survival Functions (Log-Rank, Breslow and Tarone-Ware) | PRO | PRO | PRO | PRO | PRO | PRO | |
| Nonparametric Tests: Sign Test, Wilcoxon Test for One Sample and Paired Sample, Two Sample Kolmogorov-Smirnov Test, Mann-Whitney Test, Kruskal-Wallis ANOVA, Mood's Median Test, Friedman ANOVA | PRO | PRO | PRO | PRO | PRO | PRO | |
| Power and Sample Size (One, Two and Paired-Sample t-Test, One Way ANOVA) | PRO | PRO | PRO | PRO | PRO | PRO | |
| One Way ANOVA, Two Way ANOVA | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| One Way and Two Way Repeated ANOVA | PRO | PRO | PRO | PRO | PRO | PRO | |
| Hypothesis Testing: One Sample and Two-Sample t-Test, Pair-Sample t-Test, Welch Corrected t-Test | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| Hypothesis Testing: One Sample and Two Sample Hypothesis Tests for Variance | PRO | PRO | PRO | PRO | PRO | PRO | |
| ROC Curve | PRO | PRO | PRO | PRO | PRO | PRO | |
| Correlation Coefficient and Discrete Frequency | PRO | PRO | PRO | PRO | PRO | PRO | |
| Basic Descriptive Statistics | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 1D and 2D Frequency Count | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Normality Test | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

| MATHEMATICS | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
|---|-----|-----|-----|------|-----|-----|-----|
| Akima Spline in Interpolation | ✓ | | | | | | |
| Insert Range Variable/Column Label Cell by Selection in Set Column/Matrix Values Dialog | ✓ | ✓ | | | | | |
| More Functions in Set Column/Matrix Values Dialog | ✓ | ✓ | ✓ | | | | |
| Compute Polygon Area | ✓ | ✓ | ✓ | ✓ | | | |
| Compute Surface Area and Matrix Area | PRO | PRO | PRO | PRO | PRO | | |
| Normalization Across Multiple Columns or Curves | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| 3D Interpolation | PRO | PRO | PRO | PRO | PRO | PRO | |
| 1D Interpolation and Extrapolation | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Interpolation and Extrapolation of Y From X | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Trace Interpolation on XY Data | PRO | PRO | PRO | PRO | PRO | PRO | |
| Trace Interpolation on XYZ Data | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| 2D Interpolation and Extrapolation | PRO | PRO | PRO | PRO | PRO | PRO | |
| 2D Volume Integration | PRO | PRO | PRO | PRO | PRO | PRO | |
| Set Column or Matrix Values by Using Mathematics Operations | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| IMAGE HANDLING | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
| Image Crop, Rotate, Flip, Shear, Resize, Offset, Auto Trim | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Spatial Image Filter (Average Filter, Gaussian Filter, Median Filter, Noise, Sharpen, Edge Detect) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| User-Defined Spatial Image Filter | PRO | PRO | PRO | PRO | PRO | PRO | |
| Image Conversion: Image to Data, Color Image to Grayscale, Data to Image, Binary and Auto Binary | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| RGB Merge and RGB Split for Image | PRO | PRO | PRO | PRO | PRO | PRO | |
| Image Adjustment: Brightness, Contrast, Gamma, Hue, Saturation, Histogram Contrast, Histogram Equalization, etc. | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Image Math: Alpha Blend, Pixel Logic, Replace Background, Subtract Background, Subtract Interpolated Background, etc. | PRO | PRO | PRO | PRO | PRO | PRO | |
| Morphological Filter | PRO | PRO | PRO | PRO | PRO | PRO | |
| Function Look Up Table | PRO | PRO | PRO | PRO | PRO | PRO | |
| Mathematical Function for Pixel Values of Image | PRO | PRO | PRO | PRO | PRO | PRO | |

| WORKING WITH EXCEL | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
|--|-----|---|-----|------|-----|---|-----|
| Import or Open XLSM File (Excel with Macro) | ✓ | ✓ | ✓ | | | | |
| Maintain Cell Formats When Importing Excel File | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Import or Open XLSX File | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Set Column Designations When Importing Excel File | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| User-Defined Maximum Number of Empty Columns When Importing Excel File | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Convert Excel Column Headers into Origin Column Headers | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Link to External Excel File for Relative Path to Project Path | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Open XLS File Inside Origin | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Plot from XLS Sheet Inside Origin | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Save Excel File as External/Internal File of the Project | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| CONNECTIVITY W/ OTHER APPLICATION | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
| Mathematica Link for Data Exchange Between Origin and Mathematica | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| MATLAB® Console with GUI Support to Transfer Data Between Origin and MATLAB® | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| LabVIEW Connectivity | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Automation Server Support | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Use Excel As a Client Application | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Use Visual Basic As a Client Application | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

| PROGRAMMING | 9.1 | 9 | 8.6 | 8.5* | 8.1 | 8 | 7.5 |
|---|-----|---|-----|------|-----|---|-----|
| Code Builder has New Editor based on Scintilla Code, which supports, among other things, Code Folding | ✓ | ✓ | | | | | |
| Origin C: Access to Full NAG Mark 9 Library | ✓ | ✓ | | | | | |
| LabTalk: Support for User-Defined Function | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| LabTalk: Support for Event-Triggered Script Execution | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| LabTalk: Data Types Include Integer, Double, Constant, Range, String, Dataset, Function and Tree | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| X-Function: Easy Creation of Custom Tools with Automatic GUI by X-Function | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| X-Function: Execute X-Function from LabTalk Script and Menu | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Command Window: Auto-Complete Support for Scripting | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Developer Kit: Run Tools and Wizards Created with Microsoft Visual C++ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Origin C: Create Custom Dialog for Your Routine | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Origin C: User-Defined Class Support | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |



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