



SigmaPlot® 11

Designed Specifically to Meet the Needs of the Professional

SigmaPlot is the scientific graphing and data analysis software package with an award-winning interface and intuitive wizard technology that guides users step-by-step through the graph creation and data analysis process. SigmaPlot provides the flexibility to easily customize every graphic detail and create publication-quality graphs you simply can't get from a basic spreadsheet package. Join the more than 200,000+ scientists and engineers who have used SigmaPlot to show meaningful discoveries in their research data for technical publications, presentations or the web.

The Most Effective Way to Analyze and Graph Research Data

MORE POWER FROM SIGMAPLOT11 WITH NEW FEATURES LIKE:

2D Vector Plots

A 2D Vector plot is a display of a field of vectors in x,y coordinates where both direction and magnitude are represented. A popup dialog box can allow the user to specify arrow properties such as color, line thickness, and arrowhead length and angle.

Global Curve Fitting

It allows users to easily setup a global curve fit. It gives users the ability to easily share one or more equation parameters across multiple data sets.

SigmaStat Permanently Included in SigmaPlot

This addition transforms SigmaPlot into a complete statistical analysis and technical graphing suite. SigmaStat Version 4.0 will be available as a separate program for those who currently use SigmaStat.

Pre-Formatted Worksheets

The user can start by selecting the type a graph that they wish to create and a worksheet will be automatically created with the data format required for that graph.

Data entered into the worksheet is immediately displayed on the graph.

This feature can help the user understand and exploit the strong relationship between the data format and the graph type.

Automatic Updating of Quick Transforms

Each SigmaPlot worksheet can hold a list of user defined transforms that will automatically be re-run whenever the transform input data has changed.

Improved 3D Graph Customization

In SigmaPlot10, just about all objects in a 2D graph were selectable with a mouse click. SigmaPlot11 now adds mouse selectability to all 3D graph objects.

New User Interface

SigmaPlot11 now enjoys an updated look and feel across the entire application. Users can also add or prune out toolbar features or functions the user decides he's going to use thereby streamlining his customized workspace.

Support for EMF Files

Enhanced Metafile Format (EMF) files are a new and improved 32-bit revision of the WMF format. EMF files have extended functionality over WMF files. SP11 now includes support for importing and exporting EMF files.

100% Vista Compliant

SigmaPlot11 is fully Windows Vista compliant and including support for SigmaPlot help files.

Import Excel 2007 Files Directly into SigmaPlot 11

SigmaPlot11 adds enhanced compatibility for Microsoft Office 2007.

Standard Curves Macro Improvement

In addition to the EC50 value already computed, the user can also compute other user-entered values like EC40 and EC60 values instantly. Two five-parameter logistic functions have been added and the Dynamic Curve Fitting feature included to help solve difficult curve fitting problems.

SigmaPlot 11 Features

GRAPHING FEATURES

2D

- Vector - 2 Types *
- Area Plots - 4 Types
- Scatter - 14 Types
- Line - 4 types
- Scatter and Line - 10 types
- Step - 8 types
- Vertical Bar - 2 types, Vertical Grouped Bar - 2 types
- Horizontal Bar - 2 types, Horizontal Grouped Bar - 2 types
- Vertical, Stacked Bar
- Horizontal, Stacked Bar
- Box - 2 types
- Polar - 3 types
- Contour, line and filled - 2 types
- Histograms - 6 types
- Ternary - 3 types
- Bubble
- Pie
- Control Charts
- Needle
- High-low-close, Range, Quartile
- Quadrant
- Population

3D

- Select any object to make precise modifications *
- Automatically interpolate unordered 3D data
- Multiple, intersecting plots with hidden line removal, smooth or discrete shading, transparent or opaque fills, and light source shading
- 3D rotation
- Perspective preview
- Scatter
- Bar
- 3D line - trajectory
- Mesh - with or without contour projections
- Contour
- Waterfall

Create Graphs Easily

- Pre-formatted Worksheets: Use graph and worksheet dis plays to design the graph. Entering new data immediately dis plays the results *
- Program Startup Screen: helps both first time users or power users start their workflow with easy access to previously used documents, quick Excel and Access database import; use older documents as templates for new work
- Graph Style Gallery: Save any graph with all graph properties and add a bitmap image to the gallery to recreate complex graphs
- Graph Toolbar: select toolbar icon of the graph type and style you want to create a graph or to add additional curves to an existing graph
- Graph Wizard: easy to use, step-by-step wizard for helping you select a graph type and pick data
- Default graph settings: set preferences for graph options to create favorite graphs more easily
- Templates: create custom graph page templates to store for easy accessibility and future use
- "Intersections" now supported for area fills

Technical Axes

- Reciprocal (including Arrhenius)
- Weibull
- Linear
- Log10
- Natural log
- Probit
- Logit
- Probability
- Reverse
- Ternary percentage
- Ternary unary
- Polar (both clockwise and counter clockwise)
- Category (text data automatically binned into groups)
- Time and date
- User-defined custom axis to create almost any scale

Axis Features

- Control of display, thickness, color, range, and axis breaks
- Offset axes
- Automatic titles
- Multiple axes: Add Axis Wizard for creating multiple axes easily
- Ticks: customize major & minor intervals, in & out orientation, top & bottom location, length, thickness, color, and tick mark selection from column to create custom axes
- Labels: customize prefix, suffix, numeric, and time & date
- Axis breaks: customize symbol, thickness, color, length, gap width, and post break interval

Symbol Types

- Over 80 symbol types
- More line types types for line plots and line scatter plots, free-form lines, boxes and ellipses
- 50 fill patterns for bar charts, box plots, pie charts, area plots and free-form boxes and ellipses
- Edit font when using text as symbol
- Access new lines, fills, and symbols directly from graph operations dialog, toolbar, legend page, and the symbol dialog box



Exact Graphs with Advisory Stats

Error bars

- Mean, Median, First and Last values for symbols
- Standard deviation, Standard error
- 10th, 25th, 75th, and 90th Percentile
- Min and Max
- 95% or 99% confidence
- Calculate error bars from replicate values across rows
- User-defined upper and lower error bar values
- One way, two way and asymmetric error bars
- Percentile method: 2-types

Multiline Text Editor

- Control font, size, style, color, Greek, multiple levels of superscript & subscript, 360 degree rotation, left, right & center justification, and line spacing

Grids and Fills

- Control of color, line type, thickness, and display of major & minor grids in X, Y, & Z direction
- Control of pattern and edge color, pattern style, pattern density, and edge thickness Symbols

Reference Lines

- Control mean, standard deviation, standard error, user-defined constants, 95% and 99% confidence intervals
- Up to 5 horizontal or vertical lines
- Control of color, line type, and thickness

Drop lines

- Display in any or all X, Y, and Z directions

Legends

- Automatic or manually created
- Legends for regressions, confidence, and prediction intervals
- Turn on and off lines and symbols
- Place line and symbol before or after text

Function Plotter

- Plot 2D and 3D functions
- Over 100 2D and 3D built-in, graphically-illustrated equations
- User-defined parameters, scale and range
- Customize the SigmaPlot library of functions or create your own
- Plot functions on new or existing graphs
- Plot multiple different parameter values simultaneously
- Select line properties for each function
- Equation Solver: solve equations or functions containing a single independent variable and any number of parameters

Graphs Created Through Transforms

- Gaussian cumulative distribution
- Area - shading under and between curves
- Z plane design
- Kaplan-Meier survival
- Frequency
- Complex Control charts

DATA ANALYSIS FEATURES

Regression Wizard

- Linear and nonlinear regressions
- 2, 3, 4, and 5-segment piecewise-linear models
- Over 100 built-in, graphically-illustrated equations
- Marquardt-Levenberg algorithm with up to 10 independent variables and 25 parameters
- Define constraints, tolerance, step size and iterations
- Automatically determines your initial parameters
- Writes a complete statistical report to your SigmaPlot Notebook
- Automatically graphs your results on new or existing graphs
- Option to add 95 or 99% confidence and prediction bands to a results graph
- Optional Reduced Chi-Square Regression weighting
- Customize the SigmaPlot fit library or create your own fit functions

Dynamic Fit Wizard

- Solves difficult curve fitting problems by finding local and global fit solutions
- Selects many initial maximally-distant starting parameter sets and ranks the resulting fits
- Shows the local minima with a Dynamic Fit Profile graph

Global Fit Wizard *

- Fit multiple data sets using shared parameters *
- Without sharing can be used to fit multiple data sets with the same equation *

Automatic Linear Regressions

- Up to 10th order with confidence and prediction intervals and regression statistics

Column Descriptive Statistics Generated Automatically

STATISTICS

- Over 30 of the most frequently used statistical test to analyze scientific research
- Advisor Wizard guide you through the process of choosing the appropriate statistical test
- Report generation that translates the statistics into plain and simple English
- Descriptive statistics
- Non-parameter tests: t-tests, ANOVA
- One-way, two-way, three-way ANOVA
- Repeated measures
- Rates and proportions
- Correlation
- Survival analysis (Kaplan-Meier, Cox Regression)
- Power and sample size analysis

SMOOTHING

2D & 3D Smoothing Routines

- Negative exponential
- Running average
- Loess
- Running median
- Bisquare
- Inverse square
- Inverse distance (for 3D smoothing)

TRANSFORMATIONS

Quick Transforms

- Perform quick mathematical transforms provided in a function palette
 - Automatic Updating of multiple transforms in worksheets *
- ### Mathematical Transforms
- 36 probability density and cumulative transforms *
 - Histogram
 - Normalize ternary data
 - Interpolate 3D mesh
 - Sorting
 - Fast fourier transforms with filters
 - Loewess smoothing
 - Differential equations
 - Data to RGB-color transform
 - Trigonometric and algebraic functions
 - Random and gaussian random number generation
 - Range, accumulation, precision, and more
 - Transforms are now kept in notebook files as JNB files for easier organization of transforms; create transform libraries; associate Transforms with data sets
 - Protect and track changes to transforms for 21 CFR Part 11

GENERAL FEATURES

Large, Scientific Worksheets

- 32,000 columns by 32,000 rows
- Handles numeric, text (categorical), and date & time data
- Data sorting
- Rename, insert and delete rows and columns
- Insert color, symbols, line styles and bar patterns
- Independent graphically adjustable row height and column widths
- Missing data handling
- Data point sampling
- Graphical feedback of current curve and datapoint
- Text support of up to 256 characters
- Change the font type and grid colors
- Change font for worksheet
- Multiple Undo
- Format empty cells - formatted selected columns even if they do not contain data
- More flexible column titles allow for duplicates and numeric only titles
- Enhanced data/time recognition and more formats
- Arrow-key functionality is similar to that of Microsoft Excel
- Freeze Panes and print preview
- Multi-line editing - text wraps to fit the column while the row height automatically adjusts
- Find and replace data

SigmaPlot Notebook Manager

- Dialog-bar-based notebook manager has several states: docks, resizable, hide-able, summary information mode, etc.
- Can hold SigmaPlot worksheets, Excel worksheets, reports, regression wizard equations, graph pages, transforms and macros.
- Direct-editing of notebook summary information

SigmaPlot Report Editor

- Cut and paste or use OLE to combine all the important aspects of your analysis into one document. Choose from a wide range of styles, sizes, and colors from any system font.
- Export to most word processors
- Add decimal tabs, tab leader, true date/time fields
- Auto-numbering
- Improved formatting ruler

Page Layout and Annotation Options

- Direct graphic file import into graph page
- Real-time mouse-over XY and page coordinate feedback
- Click-through accessibility to select and edit graph objects buried under other items
- OLE 2 container and server
- Automatic or manual legends
- True WYSIWYG
- Multiline text editor
- Multiple curves and plots on one graph
- Multiple axes on one graph
- Arrange graphs with built-in templates
- Multiple levels of zooming and custom zooming
- Easily change the size and position of multiple selected objects simultaneously to lay out and arrange graphs and other objects quickly
- Scale graph to any size
- Resize graphic elements proportionally with resizing graph
- Alignment and position tools
- Draw lines, ellipses, boxes, arrows
- Layering options
- Over 16 million custom colors
- Inset graphs inside one another
- Selection of graph objects
- Right-click property editing
- Color schemes
- Paste graphic objects from other programs
- Graph page rulers
- Adjustable snap-to grids

"Picking from Column" Option

- Enter colors, patterns, symbols, line styles, tick mark intervals, tick labels and more directly into your worksheet to customize your graph the way you want. Transforms and "picking from column" allow you to create data dependent color gradients, symbols and sizes.

Automate Routine and Complex Tasks

- Visual Basic compatible programming using built-in macro language interface
- Macro recorder to save and play-back operations
- Full automation object support - use Visual Basic to create your own SigmaPlot-based applications
- Run built-in macros or create and add your own scripts
- Add menu commands and create dialog boxes
- Toolbox menu: helpful macros appear as a separate menu item
- Export graph to PowerPoint Slide
- New 'Insert Graph to Microsoft Word' Toolbox macro
- New keyboard shortcuts in the Graph Properties and most Microsoft Excel keyboard shortcuts in the worksheet

Windows Application

- Excel, Word and PowerPoint for Office 2000 and Windows 2000 support ToolTips
- Tips and Tricks at startup
- Full 32-bit implementation
- OLE 2 container and server
- Use Excel worksheets inside SigmaPlot
- Controls have bitmaps to give feedback about selections
- Right mouse button property editing
- Selection of objects on graph page
- Full precision and date/time Microsoft Excel copy and paste

Microsoft Office Integration

- You can open Excel spreadsheets directly inside SigmaPlot, allowing you to use the many features Excel offers. Use in-cell formulas and other Excel data analysis tools on your data.
- One-click access to directly launch SigmaPlot from Microsoft Excel

IMPORT & EXPORT OPTIONS

Import

- Directly import SAS data sets (.sd2 and .sas7bdat files)
- Directly import Minitab data sets (.mtw & .mpj files)
- Open Axon Binary, Axon Text, ASCII Plain, Comma and general import filter, 1-2-3T, Symphony T, Quattro T, Excel, dBASE E, DIF, all SigmaPlot files through SigmaPlot 9.01, SigmaStat files (all versions), SYSTAT, SigmaScan Pro, Sigma Scan, SigmaScan IMAGE, Mocha
- Import any ODBC compliant database
- Run SQL queries on tables and selectively import information

Export

- SAS files (.sd2 and .sas7bdat files)
- Minitab files (.mtw & .mpj files)
- ASCII Text, Tabbed, Comma, 1-2-3T, Excel, DIF, all SigmaPlot files through SigmaPlot 9.01, SigmaScan Pro
- PDF, PSD and HTML export of graphs and reports

Import Graphics Options

- Load popular graphic file formats directly into SigmaPlot graphic BMP, JPEG, GIF, TIFF, Cursor and Icon Files & many more

Graph Publication Export Options

- Submission Assistant Stores an extensible list of publication requirements and is used to double check whether exported figures meet standards of publication and allows creation of customized output profiles
- Export an individual graph, a group of graphs and objects, or an entire page
- Different levels of resolution and color depths: PDF, EPS, TIFF, JPEG, EMF, BMP
- True color EPS vector and CMYK EPS export
- Compressed CMYK TIFF
- Publication Help: guides user through the complexities selecting the correct DPI, image size, file export format

Publish as Web Page

- Export graphs as high-resolution Web objects
- WebViewer: free browser plug-in to view data used to create graph or print, pan and zoom in on graph without losing resolution
- The WebViewer supports IE 4.01 or higher. A screen resolution JPEX file is automatically displayed for browser applications and operating systems

SYSTEM REQUIREMENTS

- Windows XP, 2000 or NT 4.0
- Pentium 200 or clone
- 64MB or more of RAM
- 48MB of disk space
- CD-ROM Drive
- SVGA/256 color graphics adapter (800 x 600, High Color recommended)
- To use HTML Help, Internet Explorer 4.01 or later required

To learn more about SigmaPlot and other Systat products, contact your nearest Systat office or visit us at www.systat.com



* New Features added in SigmaPlot 11

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