

## Chapter 1 : Grace User's Guide (for Grace)

*Sigmaplot for Windows User Guide Jan 1, by Spss Inc. Paperback. \$ (5 used & new offers) Sigmaplot Programming Guide Jul 1, Paperback.*

The change is immediately graphed and if you move your cursor off the panel then it becomes transparent and you can see the effect of your changes without leaving the panel. SigmaPlot takes you beyond simple spreadsheets to help you show off your work clearly and precisely. With SigmaPlot, you can produce high-quality graphs without spending hours in front of a computer. The user interface also includes Microsoft Office style ribbon controls. And the tabbed window interface efficiently organizes your worksheets and graphs for easy selection. And these tabs may be organized into either vertical or horizontal tab groups. Graph Gallery and Notebook Manager panes may be moved to any position and easily placed using docking panel guides. You can add frequently used objects to the Quick Access Toolbar. Take advantage of ribbon collections of common properties, tabbed selection of graphs, worksheets and reports, right mouse button support and graph preferences. The interactive Graph Wizard leads you through every step of graph creation. You get compelling, publication-quality charts and graphs in no time. SigmaPlot offers more options for charting, modeling and graphing your technical data than any other graphics software package. Compare and contrast trends in your data by creating multiple axes per graph, multiple graphs per page and multiple pages per worksheet. More than 2-D and 3-D Graph Types More than 2-D and 3-D technical graph types From simple 2-D scatter plots to compelling contour and the new radar and dot density plots, SigmaPlot gives you the exact technical graph type you need for your demanding research. And, to help you see interactions in your 3-D data, SigmaPlot powerfully renders multiple intersecting 3-D meshes with hidden line removal. With so many different chart and graph types to choose from, you can always find the best visual representation of your data. Customize Every Detail of your Charts and Graphs Customize every detail of your charts and graphs SigmaPlot offers the flexibility to customize every detail of your graph. You can add axis breaks, standard or asymmetric error bars and symbols; change colors, fonts, line thickness and more. Double-click on any graph element to launch the Graph Properties dialog box. Modify your graph, chart or diagram further by pasting an equation, symbol, map, picture, illustration or other image into your presentation. Add greater speed and efficiency to your analysis by quickly recalling an existing graph type you need and applying its style to your current dataset. In the Notebook Manager, you can copy and paste a graph from one worksheet to another and all the attributes of that graph are applied to the new data saving much time. Publish your charts and graphs anywhere Create stunning slides, display your graphs in reports or further customize your graphs in drawing packages. Then, just double click your graph to edit directly inside your document. Quickly send your high-resolution graphs online to share with others. Viewers can explore data used to create vector graphs and zoom, pan or print images at any resolution directly from a Web Browser. Automatically generate active Web objects from your graphs or embed the objects within other Web pages. You can fit a curve or plot a function and get a report of the results in seconds. Use built-in transforms to massage your data and create a unique chart, diagram or figure. Use Excel in-cell formulas, pivot tables, macros and date or time formats without worry. Keep your data and graphs in one convenient file. Transforms and Quick Transforms Transforms and Quick Transforms Generate simulated data or modify worksheet columns of data with transforms. Create simple one-line transforms with the Quick Transforms feature that walks you through transform implementation. Or create extremely complex transforms with hundreds of lines of code. The Regression Wizard automatically determines your initial parameters, writes a statistical report, saves your equation to your SigmaPlot Notebook, and adds your results to existing graphs or creates a new one! You can even add your own curve fit equations and add them to the Regression Wizard. Use the Dynamic Curve Fitter to Determine if Your Fit is Valid Use the Dynamic Curve Fitter to determine if your fit is valid The Dynamic Curve Fitter performs or more curve fits using your equation and data starting from optimally different initial starting values. The results are ranked by goodness of fit so that you can check the top ranked results against the result you obtained from the Regression Wizard. For many simple equations, which are fit to data sets with

a sufficiently large number of data points, the Dynamic Curve Fitter finds the same result as the Regression Wizard. But the problem is that the user simply does not know whether the solution found by the Regression Wizard is the best possible or not. So there is always a concern that the correct solution has not been found. Dynamic fitting minimizes this concern. Its use is encouraged prior to publishing results particularly if a complicated equation is used. Use Global Curve Fitting to simultaneously analyze multiple data Global curve fitting is used when you want to fit an equation to several data sets simultaneously. The selected equation must have exactly one independent variable. The data sets can be selected from a worksheet or a graph using a variety of data formats. You can also specify the behavior of each equation parameter with respect to the data sets. A parameter can be localized to have a separate value for each data set, or a parameter can be shared to have the same value for all data sets. The main difference is the extra panel shown below for specifying the shared parameters. Just type the function or select one from the built-in library and specify the parameters and the range. Create your own built-in functions and save them for future use. Plot functions on new or existing graphs or plot multiple functions simultaneously using different parameter values. Save plotted X and Y results to the worksheet. This includes a general purpose ASCII file importer which allows importing comma delimited files and user-selected delimiters. Plus all Excel formats may be imported. Axon binary and text electrophysiology files may be imported. Import any ODBC compliant database. Excel and Access database files are supported. Run SQL queries on tables and selectively import information. With SigmaPlot, you can record macros by point-and-click with the macro recorder. Use macros to acquire your data, execute powerful analytical methods, and create industry-specific or field-specific graphs. Use one of the thirty built-in macros as provided or use these macros as a base to quickly create your own macros. Share the power of SigmaPlot with less-experienced users by using macros to tailor the SigmaPlot interface for your particular application. Create custom dialog boxes, menu choices and forms to help guide novice users through a session. Analyze and graph your data using SigmaPlot within those applications. SigmaPlot Features Graphing Features Choose from a wide range of graph types to best present your results SigmaPlot provides more than different 2-D and 3-D graph types. From simple 2-D scatter plots to compelling contour, Forest and radar plots, SigmaPlot gives you the exact technical graph type you need for your demanding research. With so many options, you can always find the best visual representation of your data. Statistical Analysis Statistical Analysis is no longer a daunting task SigmaPlot now offers almost 50 of the most frequently used statistical tests in scientific research by integrating SigmaStat into one application. Suggestion of the most appropriate statistical tests is offered by a software-based Advisor. Raw and indexed data formats are accepted to avoid data reformatting. Violation of data assumptions is checked in the background and, if true, the correct test to use is recommended. Reports with descriptive interpretations are generated and graphs specific to each test may be created.

## Chapter 2 : Introducing WatchDox for Windows - WatchDox for Windows -

*SigmaPlot is a state-of-the-art technical graphing program designed for Windows It is both Windows 95 certified, and compatible with Office 95 and Office*

What can SigmaPlot do for you? With SigmaPlot, you can produce high-quality graphs without spending hours in front of a computer. Take advantage of industry-standard menu design, menu toolbars, right mouse button support and graph preferences. The interactive Graph Wizard leads you through every step of graph creation. You get compelling, publication-quality charts and graphs in no time. SigmaPlot offers more options for charting, modeling and graphing your technical data than any other graphics software package. Compare and contrast trends in your data by creating multiple axes per graph, multiple graphs per page and multiple pages per worksheet. More than 2-D and 3-D technical graph types From simple 2-D scatter plots to compelling contour plots, SigmaPlot gives you the exact technical graph type you need for your demanding research. And, to help you see interactions in your 3-D data, SigmaPlot powerfully renders multiple intersecting 3-D meshes with hidden line removal. With so many different chart and graph types to choose from, you can always find the best visual representation of your data. Customize every detail of your charts and graphs SigmaPlot offers the flexibility to customize every detail of your graph. You can add axis breaks, standard or asymmetric error bars and symbols; change colors, fonts, line thickness and more. Double-click on any graph element to launch the Graph Properties dialog box. Modify your graph, chart or diagram further by pasting an equation, symbol, map, picture, illustration or other image into your presentation. Add greater speed and efficiency to your analysis by quickly recalling an existing graph type you need and applying its style to your current dataset. Quickly save any graph with all graph properties as a style and add a bitmap image to the gallery No need to be an expert, create customized graphs in no time with the Graph Gallery Choose an image from the Graph Style Gallery to quickly plot your data using an existing graph template Save time by using a predetermined style to create a graph of the data Avoid re-creating complex graphs Publish your charts and graphs anywhere Create stunning slides, display your graphs in reports or further customize your graphs in drawing packages. Presenting and publishing your results has never been easier - or looked this good. Just double click your graph to edit directly inside your document. Quickly send your high-resolution graphs online to share with others. Viewers can explore data used to create graphs and zoom, pan or print images at full resolution directly from a Web Browser. Automatically generate active Web objects from your graphs or embed the objects within other Web pages. Run t-tests, linear and non-linear regressions with ease. You can fit a curve or plot a function and get a report of the results in seconds. Use built-in transforms to massage your data and create a unique chart, diagram or figure. Use Excel in-cell formulas, pivot tables, macros and date or time formats without worry. Keep your data and graphs in one convenient file. The Regression Wizard automatically determines your initial parameters, writes a statistical report, saves your equation to your SigmaPlot Notebook, and adds your results to existing graphs or creates a new one! The Regression Wizard accurately fits nearly any equation - piecewise continuous, multifunctional, weighted, Boolean functions and more - up to 10 variables and 25 parameters. You can even add your own powerful curve fits to the Regression Wizard. Plot ANY mathematical function Plotting user-defined and parameterized equations is only a mouseclick away with the Function Plotter. Just type the function or select one from the built-in library and specify the parameters and the range. Create your own built-in functions and save them for future use. Plot functions on new or existing graphs or plot multiple functions simultaneously using different parameter values. Save plotted X and Y results to the worksheet. With SigmaPlot, you can record macros by point-and-click with the macro recorder. Use macros to acquire your data, execute powerful analytical methods, and create industry-specific or field-specific graphs. Use built-in macros as provided or use these macros as a base to quickly create your own macros. Share the power of SigmaPlot with less-experienced users by using macros to tailor the SigmaPlot interface for your particular application. Create custom dialog boxes, menu choices and forms to help guide novice users through a session. Analyze and graph your data using SigmaPlot within those applications. For example, you can run a Visual Basic script in Microsoft Word

or Excel that calls on SigmaPlot to generate and embed your graph in the document.

**Chapter 3 : Polyhedron | SigmaPlot**

*Share the power of SigmaPlot with less-experienced users by using macros to tailor the SigmaPlot interface for your particular application. Create custom dialog boxes, menu choices and forms to help guide novice users through a session.*

This popup reports you which sets or points are inside or outside of a region. Hot links You can link a set to a file or a pipe using this feature. Once a link has been established, you can update it i. Currently, only simple XY sets can be used for hotlinks. Set locator fixed point After having selected this menu entry, you can select a point on a graph that will be used as the origin of the locator display just below the menu bar. The fixed point is taken into account only when the display type of the locator is set to [DX,DY]. Clear locator fixed point This entry is provided to remove a fixed point set before and use the default again: Locator props The locator props popup allows you to customize the display of the locator, mainly its type and the format and precision of the display. You can use all the formats that are allowed in the graphs scales. Preferences The preferences popup allows you to set miscellaneous properties of your Grace session, such as GUI behavior, cursor type, date reading hint and reference date used for calendar conversions. If you want to operate on the sets as a whole, you should use the set operations popup from the Edit menu. You can sort according to any coordinate X, Y, DX, The set selector of the popup shows the number of points in each set in square brackets like this: S0[63], the points are numbered from 0 to n Transformations menu The transformations sub-menu gives you access to all data-mining features of Grace. Evaluate expression Using evaluate expression allows you to create a set by applying an explicit formula to another set, or to parts of another set if you use regions restrictions. All the classical mathematical functions are available cos, sin, but also lgamma, j1, erf, For the full list of available numerical functions and operators, see Operators and functions. In the formula, you can use X, Y, Y1, An implicit loop will be used around your formula so if you say: You can use more than one set in the same formula, like this: Beware that the loop is a simple loop over the indices, all the sets you use in such an hybrid expression should therefore have the same number of points and point i of one set should really be related to point i of the other set. If your sets do not follow these requirements, you should first homogenize them using interpolation. Histograms The histograms popup allows you to compute either standard or cumulative histograms from the Y coordinates of your data. The bins can be either a linear mesh defined by its min, max, and length values, or a mesh formed by abscissas of another set in which case abscissas of the set must form a strictly monotonic array. Fourier transforms This popup is devoted to direct and inverse Fourier transforms actually, what is computed is a power spectrum. The default is to perform a direct transform on unfiltered data and to produce a set with the index as abscissa and magnitude as ordinate. You can filter the input data window through triangular, Hanning, Welch, Hamming, Blackman and Parzen filters. You can load magnitude, phase or coefficients and use either index, frequency or period as abscissas. You can choose between direct and inverse Fourier transforms. If you specify real input data, X is assumed to be equally spaced and ignored; if you specify complex input data X is taken as the real part and Y as the imaginary part. If you want Grace can to use FFTW wisdom files, you should set several environment variables to name them. Running averages The running average popup allows you to compute some values on a sliding window over your data. You choose both the value you need average, median, minimum, maximum, standard deviation and the length of the window and perform the operation. You can restrict the operation to the points belonging to or outside of a region. Differences The differences popup is used to compute approximations of the first derivative of a function with finite differences. The only choice apart from the source set of course is the type of differences to use: Beware that the period is entered in terms of index in the set and not in terms of abscissa! Integration The integration popup is used to compute the integral of a set and optionally to load it. The numerical value of the integral is shown in the text field after computation. Selecting "cumulative sum" in the choice item will create and load a new set with the integral and compute the end value, selecting "sum only" will only compute the end value. This is mainly used before performing some complex operations between two sets with the evaluate expression popup. The sampling array can be either a linear mesh defined

by its min, max, and length values, or a mesh formed by abscissas of another set. Several interpolation methods can be used: Note that if the sampling mesh is not entirely within the source set X bounds, evaluation at the points beyond the bounds will be performed using interpolation parameters from the first or the last segment of the source set, which can be considered a primitive extrapolation. This behaviour can be disabled by checking the "Strict" option on the popup. The abscissas of the set being interpolated must form a strictly monotonic array. You can load either the fitted values, the residuals or the function itself. Choosing to load fitted values or residuals leads to a set of the same length and abscissas as the initial set. Choosing to load the function is almost similar to load the fitted values except that you choose yourself the boundaries and the number of points. This can be used for example to draw the curve outside of the data sample range or to produce an evenly spaced set from an irregular one. Non-linear fit The non linear fit popup can be used for functions outside of the simple regression methods scope. With this popup you provide the expression yourself using a0, a1, You specify a tolerance, starting values and optional bounds and run several steps before loading the results. The fit characteristics number of parameters, formula, You only select the set or sets and specify the maximum lag. A check box allows one to evaluate covariance instead of correlation. Digital filter You can use a set as a weight to filter another set. Only the Y part and the length of the weighting set are important, the X part is ignored. Linear convolution The convolution popup is used to You only select the sets and apply. Geometric transforms You can rotate, scale or translate sets using the geometric transformations popup. You specify the characteristics of each transform and the application order. Sample points This popup provides two sampling methods. The first one is to choose a starting point and a step, the second one is to select only the points that satisfy a boolean expression you specify. Prune data This popup is devoted to reducing huge sets and then saving both computation time and disk space. The interpolation method can be applied only to ordered sets: The geometric methods circle, ellipse, rectangle can be applied to any set, they test each point in turn and keep only those that are not in the neighborhood of previous points. Feature extraction Given a set of curves in a graph, extract a feature from each curve and use the values of the feature to provide the Y values for a new curve.

### Chapter 4 : SigmaPlot® User's Guide | calendrierdelascience.com

*Sigmaplot 13 User Guide Pdf Added Vector PDF export. File import and export support is added for Versions 13 and 14 of Minitab, Testing and documentation of features for each build.*

### Chapter 5 : SigmaPlot 13 - Scientific Graphing and Data Analysis Software

*Sigmaplot 12 User Manual Pdf With over graph types and a user interface which allows detailed Because pdf is used so frequently, the vector PDF format is now attached to the Automatic or manual legends all.*

### Chapter 6 : SigmaPlot - Scientific Data Analysis and Graphing Software

*SigmaPlot is a scientific data analysis and graphing software package with an intuitive interface for all your statistical analysis and graphing needs that takes you beyond simple spreadsheets and helps you to produce high-quality graphs without spending hours in front of a computer.*