

Software Installation and Registration

Installation of GeoAccess Pro is easy... use the Start | Run command or Windows Explorer to navigate to and run the Setup.exe program in the Setup directory on the installation CD. Follow the instructions on screen and setup will do the rest. You can make a desktop shortcut to the file GeoAccess Pro.exe if you want quick access to the program. The system will ask for a Validation Code after installation – this will be provided with your installation CD.

User Guides

There are three separate Function Guides that describe the specific functions found in GeoAccess Pro - the Statistics User Guide, the Geotech User Guide and the MultiPlot User Guide. There is also an Overview Guide which summarises the things you need to know to quickly get the most out of GeoAccess Pro. It deals with general information regarding loading and saving data, using filters, using colour files etc.

Getting Started

The Setup program copies some example data, colour, symbol and filter files to the program directory in which GeoAccess Pro is installed (typically 'C:\Program Files\GeoAccess Professional'). These can be used to get going and experiment with the program. The examples shown in this Guide are included in the demo data set, and this data can be found in the example database GeoAccess Pro.mdb in the program directory.

Online help can be accessed by using the F1 key or from the Help menu.

File Management

GeoAccess Pro keeps track separately of the directories in which different types of files are kept, so it is advantageous to make different directories to store colour, symbol, filter files etc. Then, when using different data directories, you can easily find the other file types you need.

This **Statistics Function Guide** contains information on the following functions.

- Summary and Grouped Statistics
- Probability Plots and Histograms
- Correlation Analysis
- Variography

This guide assumes you are familiar with the general operation of GeoAccess Pro regarding loading data etc. If you are not, the separate **Overview Guide** tells you how to accomplish various general tasks and contains the following sections:

- How To Load Data
- How To Use Filters
- How To Save Data
- How To View and Edit Data
- How To Use The Main Dialog Box
- How To Use Grouping and Overlays
- How To Use Colour Files
- How To Use Symbol Files
- How To Use The Clipboard and Save Bitmaps
- How To Get Hardcopy on a Printer or Plotter

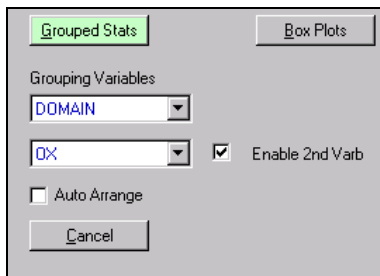
Summary Statistics



The Summary Statistics function can be found on the **Statistics** tab of the GeoAccess Pro Function Dialog Box. The function produces a range of statistics on all the numeric variables in the current data set. An example of the output is shown opposite.

Grouped Statistics

Grouped Statistics is also accessed via the **Statistics** tab.



One or two grouping variables can be selected, and GeoAccess Pro will automatically generate subsets for all different occurrences of values or text within the selected field(s). A series of windows will open displaying statistics for each subset.



The Statistics screens can be printed to the current system printer, or copied to the clipboard in a text format that is suitable for pasting into spreadsheets such as Excel or Lotus.

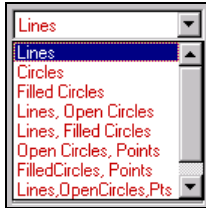
Summary Stats - assays					
	EASTING	NORTHING	RL	AU	AUCUT
Number	5202	5202	5202	5202	5202
Minimum	11500.140	1964.742	829.306	0.010	0.010
Maximum	13024.830	2273.743	1169.742	127.500	15.000
Mean	12134.276	2202.841	1078.102	3.228	2.869
Median	12049.980	2207.607	1084.783	1.720	1.720
Std Dev	448.025	31.058	53.033	5.836	3.154
Variance	200726.465	964.594	2812.517	34.056	9.949
Std Error	0.086	0.006	0.010	0.001	0.001
Coeff Var	0.037	0.014	0.049	1.808	1.100
Log Num	5202	5202	5202	5202	5202
Geom Mean	12126.074	2202.617	1076.768	1.816	1.792
Log Min	9.350	7.583	6.721	-4.605	-4.605
Log Max	9.475	7.729	7.065	4.848	2.708
Log Mean	9.403	7.697	6.982	0.596	0.583
Log S Dev	0.037	0.014	0.050	1.049	1.015
Log Var	0.001	0.000	0.003	1.100	1.031
Sichel Stats					
Sichel Mean	12126.074	2202.617	1076.768	3.146	3.001
Sichel V	0.001	0.000	0.003	1.099	1.031
Sichel	1.000	1.000	1.000	1.733	1.674
Percentiles					
10	11625.300	2173.229	1001.529	0.600	0.600
20	11675.560	2188.699	1031.203	0.890	0.890
30	11725.836	2196.846	1050.913	1.120	1.120
40	11900.000	2202.221	1069.812	1.400	1.400
50	12049.980	2207.607	1084.783	1.720	1.720
60	12248.704	2212.642	1098.874	2.200	2.200
70	12447.788	2218.134	1112.942	2.880	2.880
80	12599.780	2224.105	1127.139	3.940	3.940
90	12800.586	2230.646	1143.012	6.590	6.590
95	12900.400	2236.519	1151.413	10.227	10.227
97.5	12950.010	2244.233	1157.262	15.195	15.000
99	13012.899	2253.441	1163.231	24.889	15.000

Probability Plots and Histograms

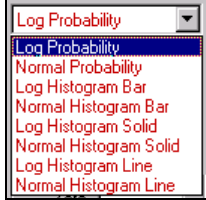
The Probability Plot and Histogram functions are accessed via the tab shown below.

This list box allows you to select the variable to be used for analysis.

This controls scaling limits for the variable and the histogram.

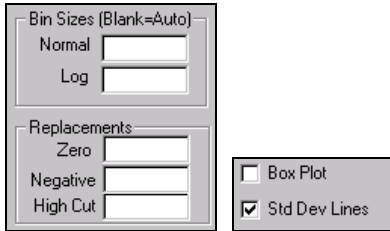


This list box controls the starting mode of the probability plot display.



This list box controls the starting mode of the function.

All settings can be interactively changed when the function has run.

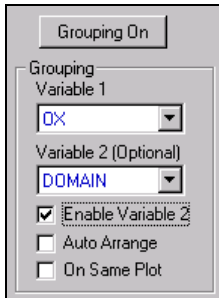


These dialogs control bin sizes, if any specific values get replaced or cut, and whether box plots and standard deviation lines are shown.

As with all other settings, these can be changed at any stage after the function has been run.

In general, the only item which is necessary to get started is the name of the variable to be used. All other options can be left blank or in the default position.

The other major option on the Probability Plot function dialog is the **Grouping** option.



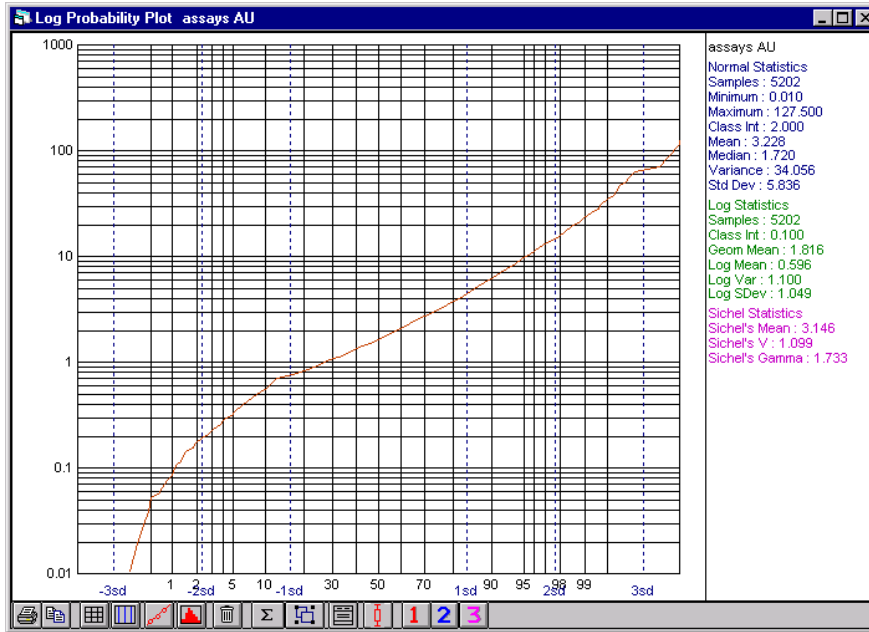
The concept of grouping allows you to pick one (or two) variables and have the system generate groups of data for all identical entries of that variable. The data does not have to be sorted, and you don't need to know the entries in the grouping field – the system will figure out what subsets to generate and open as many windows as necessary.

When two or more Probability Plot windows are displayed, you can drag one window onto another to make a composite display. This process can be repeated as required.

The **AutoArrange** option will arrange the windows generated by the grouping option so that all are visible at once, instead of being cascaded over one another.

The **On Same Plot** option will generate the required number of windows, then overlay them automatically to generate a single window with multiple probability plot lines (or histograms, depending upon the mode selected).

When the Probability Plot function is run in its simplest form, using system-generated defaults, the screen will typically look like the one on the following page.



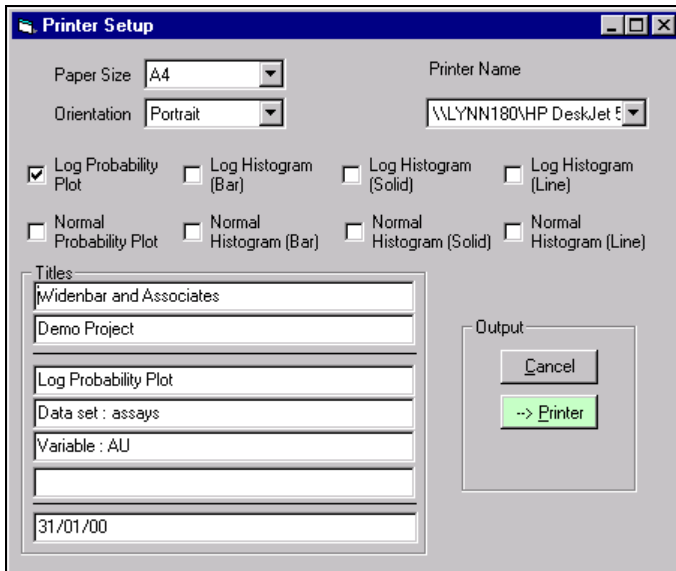
The display shows the Probability Plot, an area containing various statistical information on the loaded data set and a toolbar at the bottom with buttons to carry out a series of actions. Right clicking the mouse anywhere on the Probability Plot will open a pop-up menu with the same actions as shown on the toolbar. These actions can also be found on the Main Menu at the top of the screen under the PPlot Menu.

The actions available are described in more detail on the following pages.

The PPlot Toolbar and Menu Actions



These buttons provide access to the **Print** and **Copy To Clipboard** actions. These actions are described in detail at the end of this Guide. The PPlot printing options have been enhanced over the ordinary print function and allow multiple types of plot to be generated at once. The Print Dialog Box is shown below.



These buttons change various aspects of the grids and display modes.

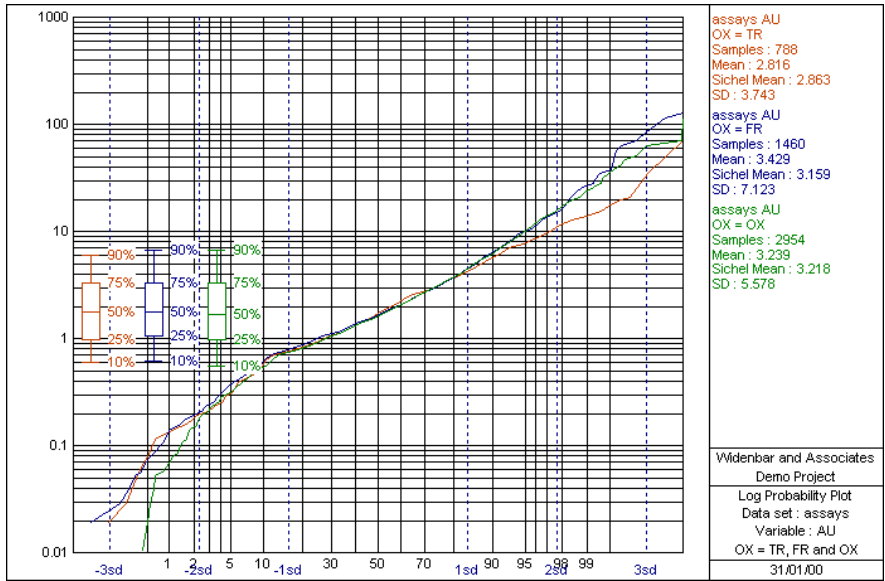
This button changes the bin size used for the histograms and probability plots.

This button toggles the Statistics Box on and off.

This button toggles the Title Box on and off. Titles can be edited.

This button toggles the Box Plot display on and off.

These buttons enable modelling of 1, 2 or 3 populations.



Enables drag-and-drop overlay, like the plot above, shown with title box and box plots.

Correlation Analysis

The Correlation Analysis function is run from the tab shown below.

Oriented Core	Stereoplot	Geotech Sections	Geotech Plans	Tools
Statistics	PPlot/Histo	Correlation	Variography	Multi Plot
X Axis Variable	CU	Min (Optional)	Max	
Y Axis Variable	AU1	X	Y	Calc
<input type="checkbox"/> Show All Possible Correlations	<input type="checkbox"/> Correlation Matrix	Show Now		
AU1		Grouping Off		
Current Colour Scheme	Current Symbol Scheme			
<input checked="" type="checkbox"/> Au 0 to 10	<input checked="" type="checkbox"/> QDS			
Colour Schemes	Symbol Schemes	OK		

The variables to be used for the X and Y axes are selected using the list boxes shown below. The minimum and maximum values can either be left blank, and will be automatically calculated, can be directly entered or can be calculated using the **Calc** button and then edited if necessary.

X Axis Variable	CU	Min (Optional)	Max	
Y Axis Variable	AU1	X	Y	Calc

Grouping Off The **Grouping** option generates multiple plots, as described for Probability Plots on Page 7 of this guide.

AU1	CODE
Current Colour Scheme	Current Symbol Scheme
<input checked="" type="checkbox"/> Au 0 to 10	<input checked="" type="checkbox"/> QDS
Colour Schemes	Symbol Schemes

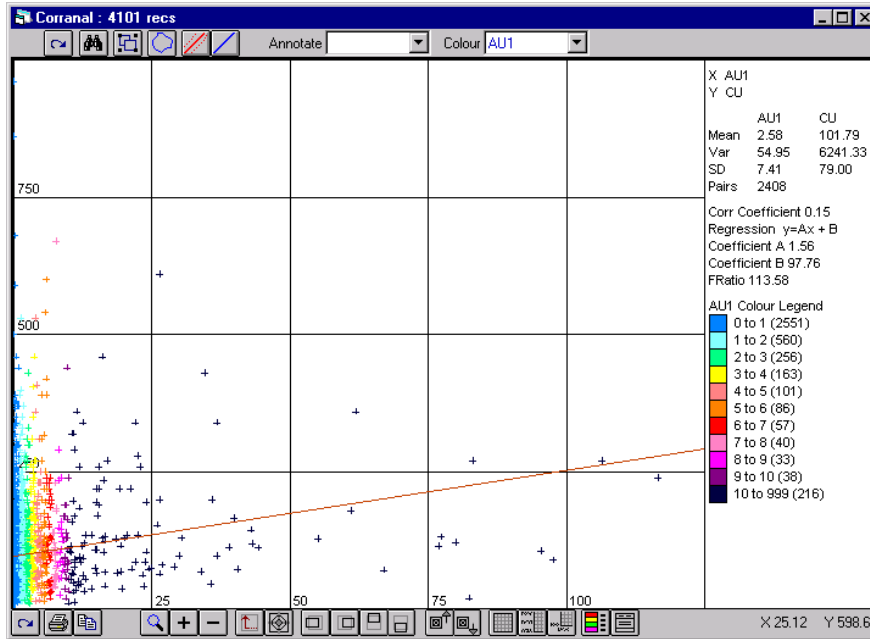
Colour Coding of points is described on page 11 of the Overview User Guide; the use of **Symbol Coding** is described on page 13 of the same guide.

Show All Possible Correlations Enabling this option will generate all the possible combinations of numeric variables that have been loaded. A separate correlation analysis window will be opened for each pair of variables.

Correlation Matrix This enables the generation of a correlation matrix of all loaded numeric variables, as shown below. This button will immediately show the correlation matrix.

	Ag_ppm	As_ppm	Au_ppm	Au1_ppm	Bi_ppm	Co_ppm	Cu_ppm	Cr_ppm	Mo_ppm	Ni_ppm	Sb_ppm
As_ppm	0.13										
Au_ppm	0.25	0.25									
Au1_ppm	0.21	0.43	0.96								
Bi_ppm	-0.01	0.05	-0.03	-0.05							
Co_ppm	0.16	0.27	0.10	0.29	-0.38						
Cu_ppm	0.21	0.10	0.04	0.10	-0.01	0.80					
Cr_ppm	0.05	0.16	0.01	0.14	-0.77	0.56	0.42				
Mo_ppm	-0.07	0.12	0.05	0.18	-0.12	-0.02	0.05	0.01			
Ni_ppm	0.13	0.14	0.03	0.26	-0.51	0.81	0.68	0.64	0.01		
Sb_ppm	0.20	0.28	0.11	0.19	0.10	0.47	0.52	0.28	0.11	0.35	
W_ppm	-0.12	-0.01	-0.02	-0.06	-0.06		0.18		0.46		0.20

When the Correlation Analysis function is run the display will look similar to the one below.



At this point toolbars at the top and bottom of the screen control the available actions. These actions can also be accessed via a pop-up menu that appears when the right mouse button is clicked, or via the MultiPlot Menu on the GeoAccess Pro Main Menu.

These buttons control the **Print** and **Clipboard** actions, which are described on the back page of this guide.

The buttons on the top toolbar carry out the **Refresh**, **Identify Point**, **Overlay** and **Polygon** actions. The **Identify Point** action shows a box containing all data from the nearest record to the mouse pointer. The data is updated as the mouse moves. The box in which the data is displayed can be dragged to any part of the screen as required. When a point is selected the data set is opened and a window shows the full record.

The **Polygons** action is used to draw a closed polygon and generate subsets inside and/or outside the polygon. Any variable can also be coded as inside and/or outside.

Annotate: The **Annotate** action will annotate all points with the chosen variable. It can also be used in conjunction with the **Identify Point** action, in which case each point selected will be annotated. **Polygons** can also be used to control annotation.

Colour: The variable and colour scheme used to colour code the data can be changed and the display is updated.

The buttons on the bottom toolbar consist of groups related to **Zoom** actions, **Pan** actions, data **Origin** and **Grid Spacing** actions, **Legend** and **Title Box** control, and **Symbol Size** control. All have Tool Tips that are displayed when the mouse pauses over the button. In addition all actions are available from the pop-up menu which is displayed when the right mouse button is clicked.

The Regression Line and a 45 degree Diagonal Line can be toggled on and off with these buttons.

Corr Coefficient 0.15
Regression $y=Ax + B$
Coefficient A 1.56
Coefficient B 97.76
FRatio 113.58

The Regression Line statistics and other summary data are shown in the Legend area.

How To Use The Clipboard and Save Bitmaps



You can send a copy of any graphics output screen to the Windows clipboard at any time using this button. The image can then be pasted into Word or any other application using the Paste | Special command – paste as a bitmap for best results. Note that with all graphic screens you can add a title block to make the image more informative. Most functions have a Save Bitmap option on the popup menu which saves the image in a bitmap file. There is also a Save All Bitmaps option which generates bitmaps for all open windows.

How To Get Hardcopy on a Printer or Plotter



Hardcopy output can be sent from any graphics screen directly to any printer attached to your computer or network. A dialog screen allows you to specify paper size, orientation and title block information.

And a final note on **Toolbars** and **Menus**. After running any function, all further actions on the output can be performed either from toolbar buttons or from the menu that appears when you right click the active graph. Also, on the Main menu bar, the same menu options will be available and will apply to the currently active window.

Contacts for More Help and Information

Call Widenbar and Associates on (08) 9386 9911 or Fax on (08) 9386 9922

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