

Software Installation

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.

Software Registration (except for Demo Versions)

The system will give you a Registration Number when installed. Fax or email this to Widenbar and Associates and you will receive a Validation Code to enter to complete the registration process.

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 Variography 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 Pro'). 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.

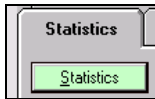
This Geotech **Function Guide** contains information on the following functions, which are available in the Geotech Module of GeoAccessPro.

- Summary Statistics and Grouped Statistics
- Geotech Oriented Core Transformation
- Geotech StereoPlots
- Geotech Sections
- Geotech Plans

This guide assumes you are familiar with the general operation of GeoAccessPro 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

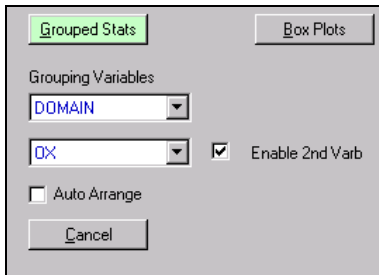
Summary Statistics



The Summary Statistics function can be found on the **Statistics** tab of the GeoAccessPro 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 GeoAccessPro 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.

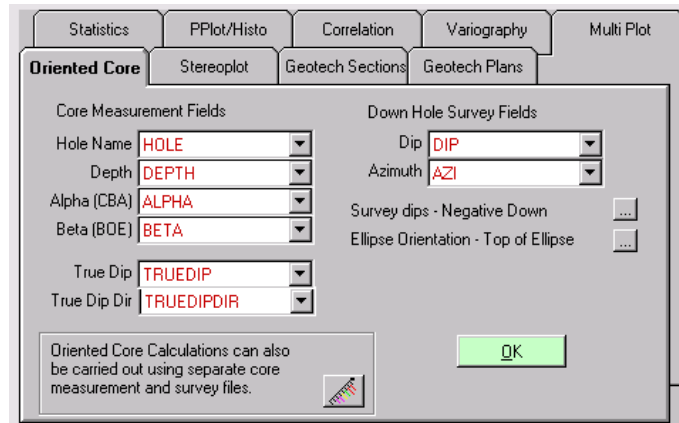


The Statistics screens can be printed to the current system printer, or copied to the clipboard in a text format that is suitable for pasting into spreadsheets such as Excel or Lotus.

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	2188.899	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	12800.566	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

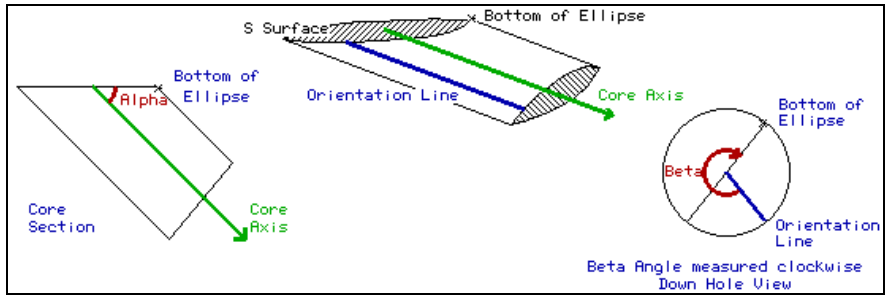
Oriented Core


The Oriented Core function converts Alpha and Beta angles measured in drill core into Dip and Dip Direction. It uses dip and azimuth data related to each hole to calculate this data. The parameters required to run the function are shown below. This screen assumes that both measurements and surveys are in same data set and already loaded.



Survey dips can be set to Positive Down, Negative Down or Zero Vertical.

The Ellipse Orientation can be set to Bottom or Top of Ellipse. If it is set to Bottom, then the Alpha or Core Bedding Angle is the angle between the core axis and the surface being measured. The Beta or BOE Angle is the angle around the core from the orientation line to the 'Bottom of Ellipse'. The Orientation Line is the line marked on the Bottom of the core. The 'Bottom of Ellipse' means the furthest downhole angle measured clockwise around the core looking down the hole.



 This button allows the downhole measurement and survey data to be in two separate data sets, which in Version 2 can be either Access database format or Micromine format. This function is also accessible directly from the Tools | Oriented Core Calcs option on the main GeoAccessPro menu. This allows the function to be run without first loading a data set. The Dialog Box controlling setup of this function is shown below.

The dialog box is divided into four main sections:

- Core Measurement Data:** Includes file selection for 'GeoAccess2000 : GeotechData' and dropdowns for Hole Name (HOLE), Depth (DEPTH), Alpha (CBA) (ALPHA), and Beta (BOE) (BETA).
- Downhole Survey Data:** Includes file selection for 'GeoAccess2000 : GeotechSurveys' and dropdowns for Hole Name (HOLE), Depth (DEPTH), Dip (DIP), and Azimuth (AZIMUTH).
- Data to be Calculated:** Includes dropdowns for True Dip (TRUEDIP) and True Dip Dir (TRUEDIPDIR).
- Options:** Includes checkboxes for 'Survey dips - Negative Down' and 'Ellipse Orientation - Top of Ellipse'.

 Buttons for 'Cancel' and 'OK' are at the bottom.

StereoPlots

The StereoPlots tab is shown below.

The StereoPlot dialog box has several tabs: Statistics, PPlot/Histo, Correlation, Variography, Multi Plot, Oriented Core, **Stereoplot**, Geotech Sections, and Geotech Plans.

- Field Names:** True Dip (TRUEDIP) and True Dip Direction (TRUEDIPDIR).
- Grouping:** Grouping On (ROCKCODE) and an Auto Arrange checkbox.
- Coloring:** ROCKCODE, ROCKCODE, and Points dropdowns.
- Schemes:** Current Colour Scheme (J1 to J4 Text), Current Symbol Scheme (j1 to j4), and Current Contour Colours (geotech contours checked).
- Buttons for 'Colour Schemes', 'Symbol Schemes', and 'Colour Schemes' are present, along with an 'OK' button.

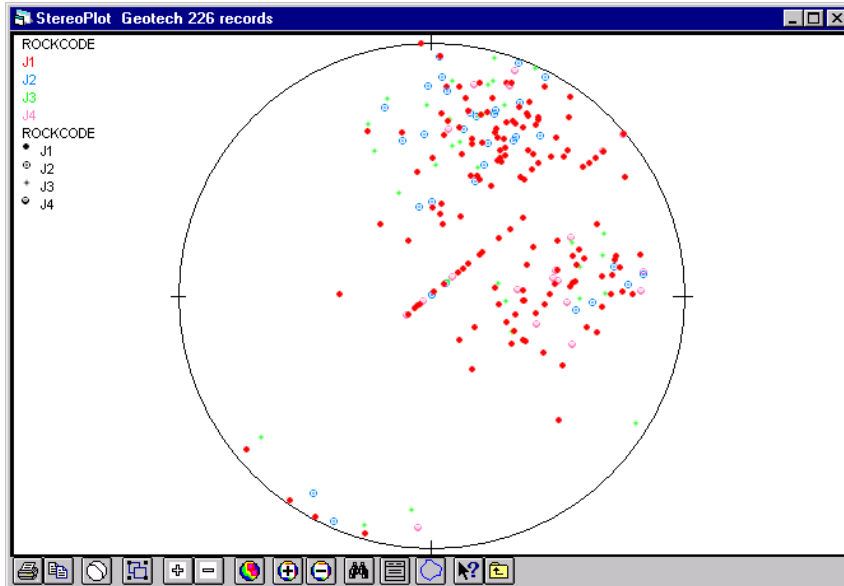
The StereoPlot function requires Dip and Dip direction variables to be in the data set. These can be from directly measured data or can be calculated from Alpha and Beta using the Oriented Core function.

The points displayed on the StereoPlot can be colour coded using any variable in the data set. A description of how to set up **Colour Schemes** can be found in the Overview User Guide.

The points displayed on the StereoPlot can also be symbol coded using any variable in the data set. A description of how to set up **Symbol Schemes** can be found in the Overview User Guide.

The StereoPlot can be contoured with either line contours or as solid shading. Contouring requires that a colour scheme is specified; contour intervals are specified in percent per percent area, and typical values range from 0 to 3 or 4%. An example contour file is included in the demo data set in the GeoAccessPro.

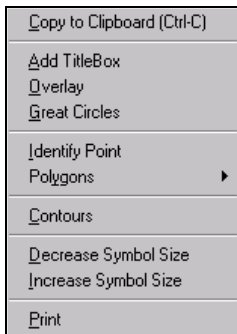
One variable can be selected for grouping, and GeoAccessPro will automatically generate subsets for all different occurrences of values or text within the selected field. A series of windows will open displaying a stereoplot for each subset. An example of the StereoPlot output using both colour and symbol coding is shown below.



The StereoPlot Toolbar and Menus



When the StereoPlot function is run and the plot is displayed further actions are available from the toolbar or from the pop-up menu which appears after clicking the right mouse button. When a StereoPlot window is open, the main menu also shows the StereoPlot menu.



The **Print** and **Copy to Clipboard** actions are described on the back cover of this User Guide.

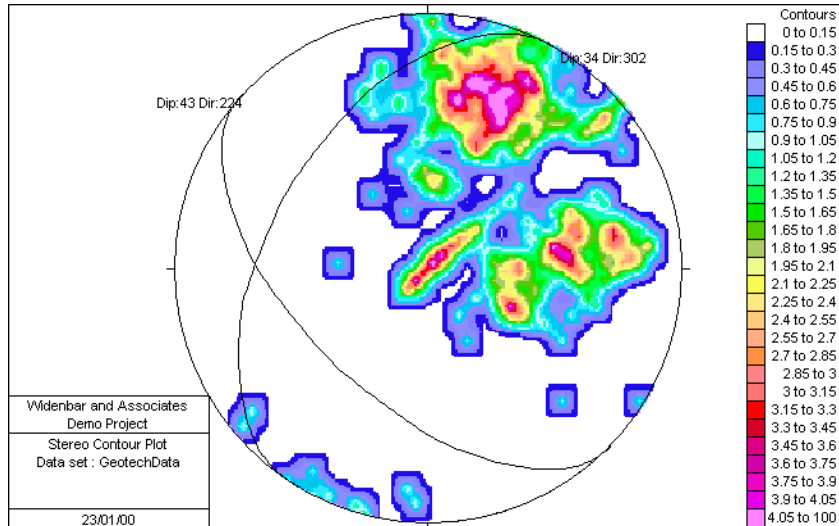
The **Add Title Box** action allows you to customise and display a title box, as shown on the example opposite, which also has **Contours** enabled and a **Great Circle** displayed.





These buttons increase or decrease the smoothness of the contouring function.



The **Identify Point** action displays the complete set of loaded data for any point on the StereoPlot.



 The **Overlay** action can be used when more than one StereoPlot window is displayed, either by opening more than one data set, or by generating a number of windows using the **Grouping** option. When one StereoPlot window is 'dragged' onto another one using this action, the data from each set is combined and displayed in the target window, maintaining colour and symbol coding separately for each set. If contouring is enabled in the target window, the contours will be regenerated using both data sets. The Overlay action can be repeated as many times as necessary.

 The **Polygons** action can be 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.

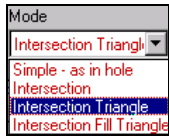
Geotech Sections and Plans

Geotech Sections are controlled using the Function Dialog Box shown below. Point data with X, Y and Z coordinates are required, with each point having a Dip and Dip Direction measurement. Optionally other variables can be used to colour code and symbol code the data displayed.

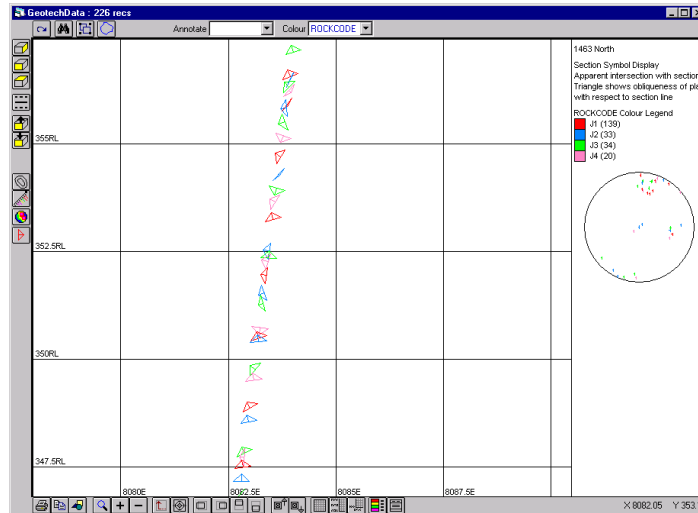
An Easting or Northing Section line must be specified and an optional search window can be nominated to clip the data.

The points displayed on the section can be colour coded using any variable in the data set. A description of how to set up **Colour Schemes** can be found in the Overview User Guide.

Symbol coding can be specified in section display, but symbols are only displayed when the orientation is changed to plan mode. The symbols will then be aligned to the dip and strike of the data points. **Symbol Scheme** setup details can be found in the Overview User Guide.



Various modes of display can be selected. **Simple – as in Hole** displays planar features dipping at the angle recorded in the data set, while **Intersection** shows the intersection of the feature with the section line. **Intersection Triangle** displays a triangle with the long side being the intersection of the plane with the section line, and the height of the triangle indicating the obliqueness of that intersection. Thus, a plane intersecting the section at right angles would display as a single line, whereas a plan running almost parallel with the section would display as an equilateral triangle. An example display is shown below.



The Geotech Sections and Plans Toolbars

When the Geotech Sections or Plans function is run the window will show the same three toolbars at the top, bottom and left of the display. On the right side is an information box, which also has a small StereoPlot display of the data within the current window. Legends for any colour or symbol codes will also appear here.



The toolbar at the left of the screen contains buttons to change the display orientation to **Easting, Northing or Plan** and to specify the clipping window for each orientation.



This button allows definition of a **Clipping Window**.



If clipping is enabled these buttons **Move** sequentially through the sections or plans.



String files can be overlaid using this action.



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.



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.



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.



These buttons control **Printer**, **Plotter** and **Clipboard** output actions. Use of the printer and clipboard actions are described on the back page of this guide.

The **Plotter** action will send a scaled plot to any printer/plotter attached to your system or network and installed as a printer device. A Plot Setup Dialog Box is displayed, which allows setup of paper size and orientation, plotter device selection, scaling and title box setup.

The dialog box contains the following elements:

- Paper Size: A1
- Orientation: Landscape
- Plotter Device Name: HP650C
- Scale 1: 2000
- Titles list:
 - Widenbar and Associates
 - Demo Project
 - Section 1463 North
 - Geotech Section
- Output buttons: Cancel, Plotter, Preview
- Status: Scale 1:2000, Plotted 25/01/00

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) 9641 2877 or Fax on (08) 641 2899

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