

## Encom™ PA v11.0

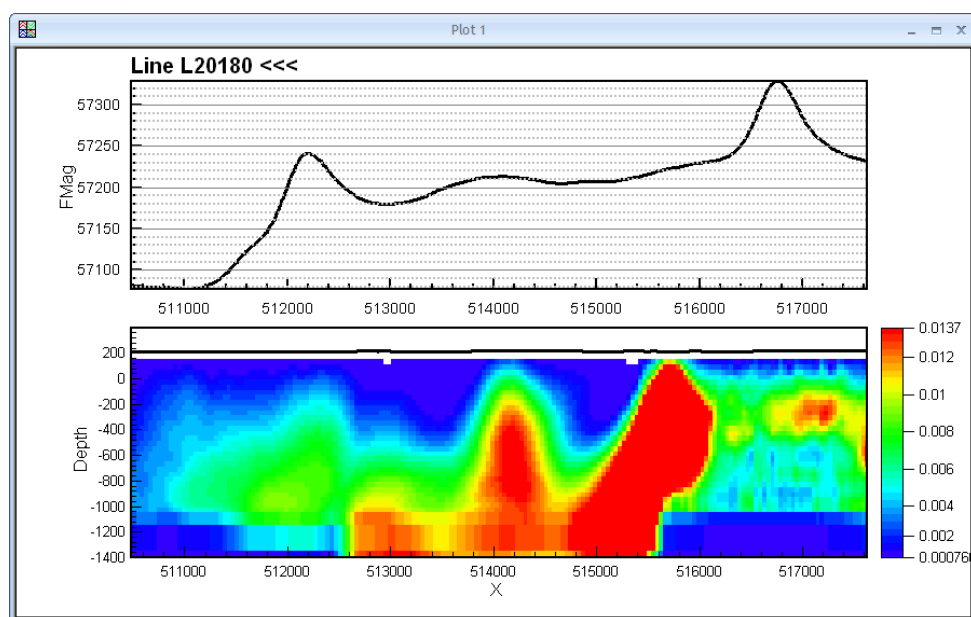
Pitney Bowes Business Insight's latest release of Encom PA illustrates the ongoing commitment to focus on what geoscientists require to transform their geophysical data into realistic models of the earth and help with data interpretation. In this release, Encom PA focuses on making it easier to work with datasets in profiles, sections, two-dimensional maps and three-dimensional displays.

Features available in this release of Encom PA are:

### Profile Map and Display Features

#### VOXEL MODEL SUPPORT IN PROFILES AND 2D DISPLAYS

It is now possible to display voxel models in curve profiles and 2D maps. In a profile display you can display the voxel model as an arbitrary slice along the azimuth of the line. In a 2D map the voxel model can either be viewed as a threshold range of property values or a horizontal slice at a specified depth. To add a voxel model to either of these display types use the Add Voxel Model button on the Data Objects toolbar or use the **Insert>Data Object>Voxel Model** menu option.



## BROADCAST PROFILE AXIS RANGE TO MAPS

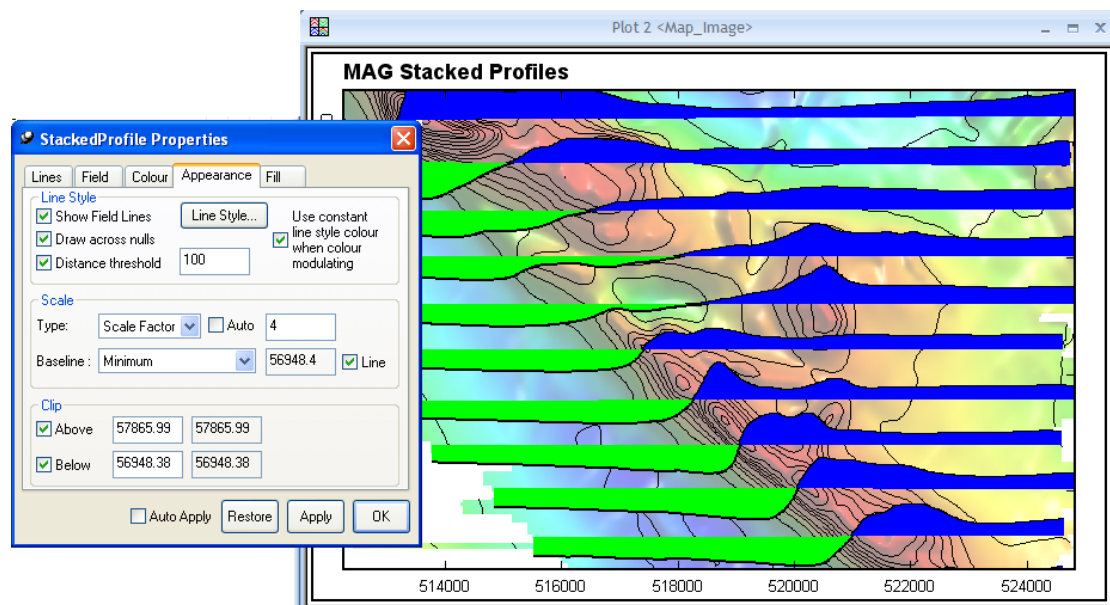
2D maps will now respond to axis range broadcasts from profile displays if the "Respond to other views" option is turned on for the Map Properties and the profile has the "Broadcast axis range" option turned on in the Profile Properties.

## IMPROVED GRAPHICAL LINE SELECTION DIALOGUE

New controls have been added to the Graphical Line Selection dialogue for lines, points, drillholes, directional vectors and stacked profiles objects. This includes a dropdown list containing various line or drillhole groupings for the dataset and the ability to save and load line selections for a dataset.

## NEW STACKED PROFILES DATA OBJECT

(For 2D maps only) This new data object creates a stacked profile from a loaded Geosoft (.GDB) database or MapInfo (.TAB) table. Performs all functionality of the old Stacked Profile tool, which is still available if preferred. New functionality allows for filling using a modulated colour field. Add a stacked profile data object using the Stacked Profile button on the Data Objects toolbar or the **Insert>Data Object>Stacked Profiles** menu option.



## Processing Utilities

### **IMPORT ASCII BATCH OPERATION**

It is now possible to import multiple ASCII files (of the same format) in one operation.

### **IMPORTING DATA FROM GRIDS**

Grids can now be loaded as survey datasets. Each row in the grid is converted to a survey 'line'. This allows grid data to be displayed using the various data plotting series including points, lines and as directional vectors. It also allows you to examine grid data via the statistics explorer and to export grid data from the spreadsheet to ASCII file as located stations. To load a grid as a survey database use the File>Open>Grid database menu option.

### **LINE EXPORTER UTILITY**

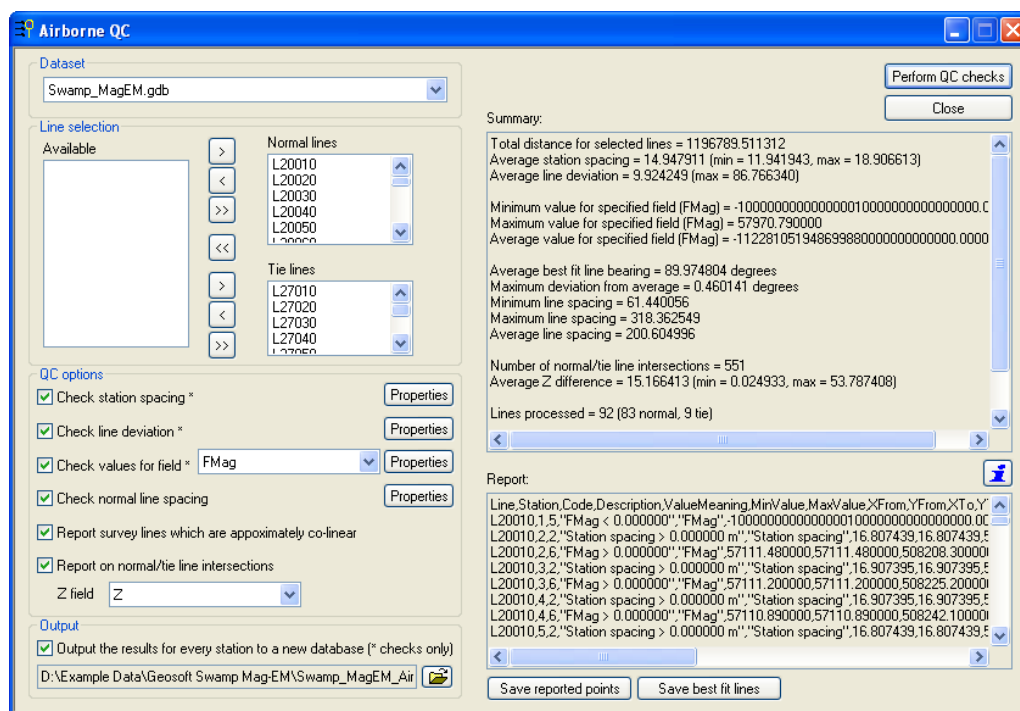
This essential utility is now accessed from the File>Export dataset... menu option and also provides additional support for ESRI shape (.SHP). The Line Exporter utility is now also accessed from a spreadsheet window by selecting the "Advanced dataset export..." option which is visible when the dataset line is selected with the right mouse button.

### **IMPROVED LINE PREFIX EDITING**

It is now possible to rename lines in the Database Maintenance utility, accessed from the Processing menu, using a Find and Replace action.

### **AIRBORNE QUALITY CONTROL TOOL**

This is a new utility accessed from the Processing menu of Encom PA designed to help analyse airborne geophysical data so that contractual obligations have been met.



## Gridding and Filtering Utilities

### LARGE AND MULTI-FILE GRIDDING UTILITY

Is a new utility for gridding large datasets (>10GB) using the Minimum Curvature gridding algorithm. Output is to .ERS or .BIL file formats. Access this new gridding utility from the Gridding menu.

### LARGE GRID SUPPORT FOR FFT FILTERS

Large input grids (>1GB) are now supported in the GridFilter utility, accessed from the Filter menu.

### GRID CALCULATOR UTILITY

This utility now allows the access of individual bands from multi-banded grids for use in calculations.

For example: two grids called GridA and GridB, both with 3 bands, a typical expression to access the second band of GridA and the third band of GridB would be:

$$\text{Output} = \text{GridA}[2] + \text{GridB}[3]*0.5 + \text{GridB}[3]*0.25$$

The above example would produce a single banded output grid.

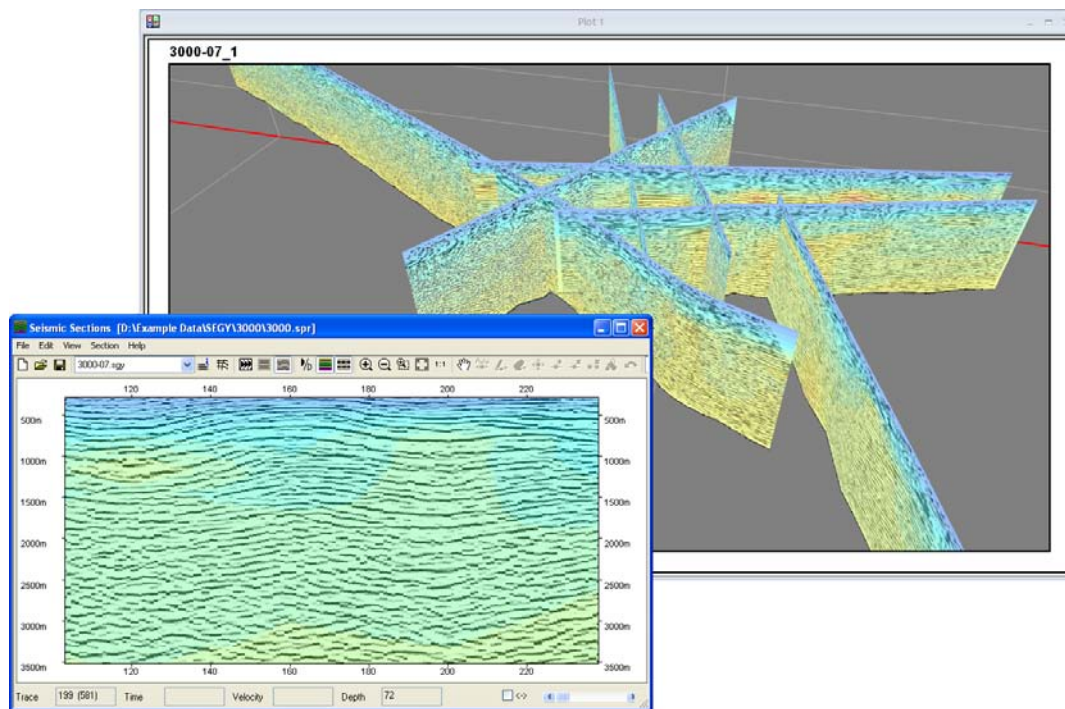
However if one or more inputs were 'all bands' such as the below expression, you would get a multi-banded grid output:

$$\text{Output} = \text{GridA} + \text{GridB}*0.5 + \text{GridB}*0.25$$

## Display Utilities

### SEISMIC DEPTH TOOL

With this new tool it is now possible to import and interpret seismic sections in SEG-Y format in Encom PA and then display the output in a 3D display. This utility is accessed from the **Display Utilities** menu.



### SAVE MAP EXTENTS AS A VECTOR FILE

This new option will generate a vector file (.TAB, .SHP or .DXF) of the current extents of a 2D map area.

### GEOREFERENCED IMAGE EXPORTER

This allows the user to create a located image file (.EGB) for a slice in a 3D display which is specified by the clipping plane for any arbitrary position. If there is a voxel model in the view, the voxel model arbitrary slice feature will need to be synchronised with the cursor plane.

## INTERACTIVE IMAGE REGISTRATION

A new dialogue has been added to the **Image Registration Wizard** located in the **Tools** menu. This allows interactive image registration by allowing the user to pick at least 3 non-collinear points of known X, Y and Z coordinate values and then the corner coordinates are extrapolated. The dialogue allows the user to enter known 3D coordinates for exact pixel locations of the bitmap. Zooming and panning is available as well as marquee zoom (hold down shift and drag the zoom rectangle). The view centres on a point when the user selects it in the spreadsheet and the user can also drag the point around the image.

## STATIC MODE IN FLY-THROUGH ANIMATION

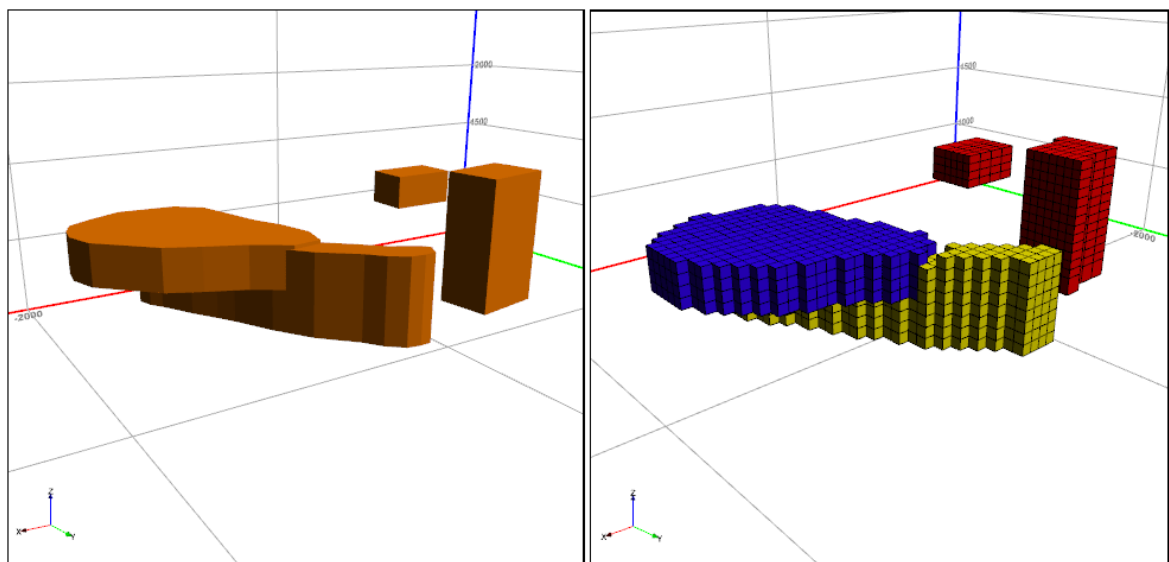
This option in the Fly-Through Animation utility is used for the automatic capture of 3D models using the Cursor Plane Clipping controls in any 3D display.

## EXPORT 3D SURFACE TO GOOGLE EARTH .KML FILE

It is now possible to create a draped 3D surface to a geo-located image for use within Encom PA (.EGB) or Google Earth (.KML) using the *Export to Located Image* pop-up menu option, which is accessed when the 3D Surface branch in the Grid Group Tree is clicked with the right mouse button.

## IMPORT MODELVISION .TKM OPTION

This option is available in the Voxel Utilities of the Voxel Toolkit, accessed from the **Voxels** menu. This new utility allows an Encom ModelVision .TKM model to be imported into a pre-existing voxel model.



## **VIEW DIRECTION TOOLBAR**

In the dropdown menu for the **View direction** toolbar button there is now a new item *Lock Direction* that will lock the current view's "look-at" direction in both select and 3D cursor modes as well as when moving using a 3D Connexion device. The view can be panned and you can move the eye and zoom in/out but you cannot rotate. Pressing the View direction toolbar button now opens a properties dialogue that allows the user more control over setting the view direction.

## **FEATURE BATCH HARDCOPY WIZARD**

The user can append a feature field value into the output filename by selecting a field in the new *Select feature field to add* drop list.