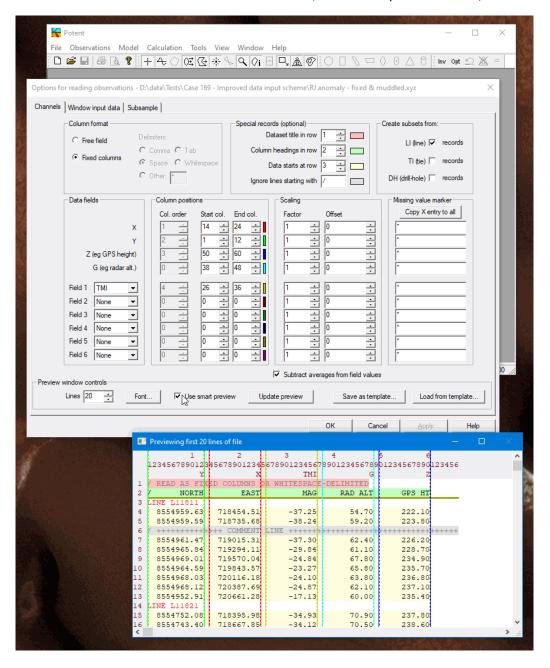# *Potent* v4.17.01 release notes

May 2021

Features

Options for reading observations dialog box too big

The dialog box that introduced the **Smart preview** feature in *Potent* v4.16.06 was 832 pixels high. On low resolution screens the bottom row of buttons (the active ones being **OK**, **Cancel** and **Help**) were not visible.

The **Preview** window is now created as a movable, resizable separate window, as shown here.

IGRF-13

Potent now uses the IGRF13 field model to calculate the International Geomagnetic Reference Field (IGRF).

IGRF13 is the thirteenth generation standard main field model adopted by the International Association of Geomagnetism and Aeronomy. It allows estimates of the field from January 1, 1900 to January 1, 2025.

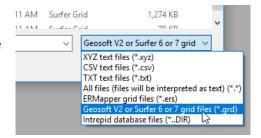### Automatic cell masking when data imported from grid

When data is imported from ER Mapper, Geosoft and Surfer grids, an appropriate masking radius is set for the displayed image.

Changes to *Image Properties* dialog box

The logic in this dialog box has been simplified. Changes made to controls take effect only when the **Apply** button is clicked.

Import Surfer™ grids

Potent now allows you to import data from Surfer type 6 and 7 grids. (In the **Open observations file** dialog box, choose **Geosoft V2 or Surfer 6 or 7 grid files (*.grd)** from the drop-down list in the bottom right corner, as shown. *Potent* works out which format is contained in the file.)

Bug fixes

Field components not imported

The problem is associated with the **Options for reading observations** dialog box. When importing values in **Fixed columns** mode the values in the greyed boxes under **Col order** should be ignored by *Potent* as they apply only when working in **Free field** mode. However, in practice it was necessary to have a value other than 0 in the **Col order** field for any required field component, otherwise the component would not be imported.

Fixed. When working in **Fixed column** mode the field component will be ignored only if either **Start col** or **End col** is 0.

Problem importing old workspaces into *Potent* v4.16

When *Potent* v4.16 attempted to load workspaces created by versions older than v4.07.02 the operation failed with the message *Filename* **has a bad format**.

The only way such workspace files are likely to be encountered is when working through some of the tutorials contained in the *Potent* on-line Help, as some example data files were created early in the development of *Potent*.

Fixed.

Potent hangs if scale set to zero

The various scale dialog boxes define a scale axis in terms of its starting value, the number of axis ticks, and the **Tick Size** (the distance, in world units such as metres, between two axis ticks).

If **Tick Size** was set to zero and **Auto scale** was not selected then *Potent* would hang indefinitely when the scale settings were applied.

This situation is now handled by an appropriate warning message.

Broken Help link in Define Window dialog box

Fixed.

Body dimensions set to negative values

Sometimes it is useful to set the P axis scale to a negative value (**Tick size** in the **Profile scales** dialog box) so that the direction of plotting goes from right to left instead of the usual left to right. If this is done, then when bodies are created their dimensions are set to negative values, with confusing results until they are made positive.

Fixed.

When subset drawing is reversed, scales of X/Y axes are not displayed correctly

This problem occurred when drawing a section as "Reversed" (**Subset attributes** dialog). If X or Y axis drawing was requested (**Profile window settings** dialog, **Axes** tab, **Mark distance axis with** group), then no values were displayed on the axis.

Fixed

The Split Polygon command can create inappropriate or invalid bodies

It was possible to key in a vertex that was outside the allowed range. A subsequent click on a spinner caused a crash.

Fixed

Incorrect Help topic title

The Help entry for the **Polygon inversion** tool was mislabelled as **Invert**.

Fixed.

Crash when creating a body from a topographic contour

When using the **Query contours** tool to create a flat-lying polygonal body *Potent* would sometimes crash.

Fixed.