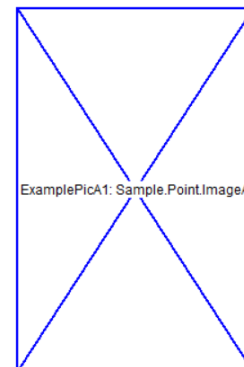
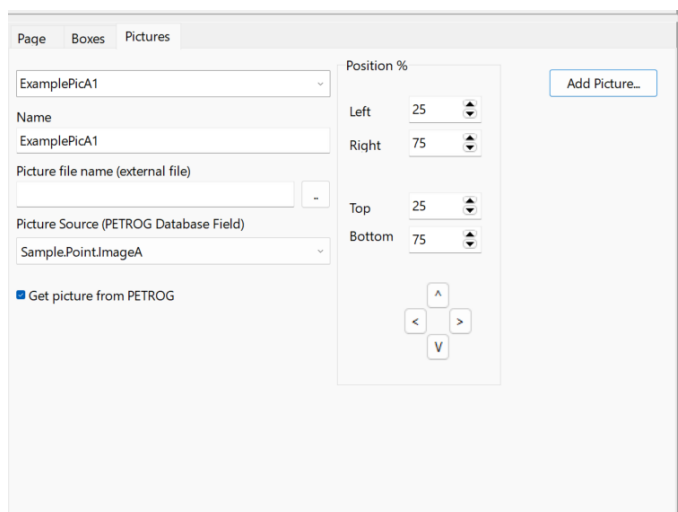
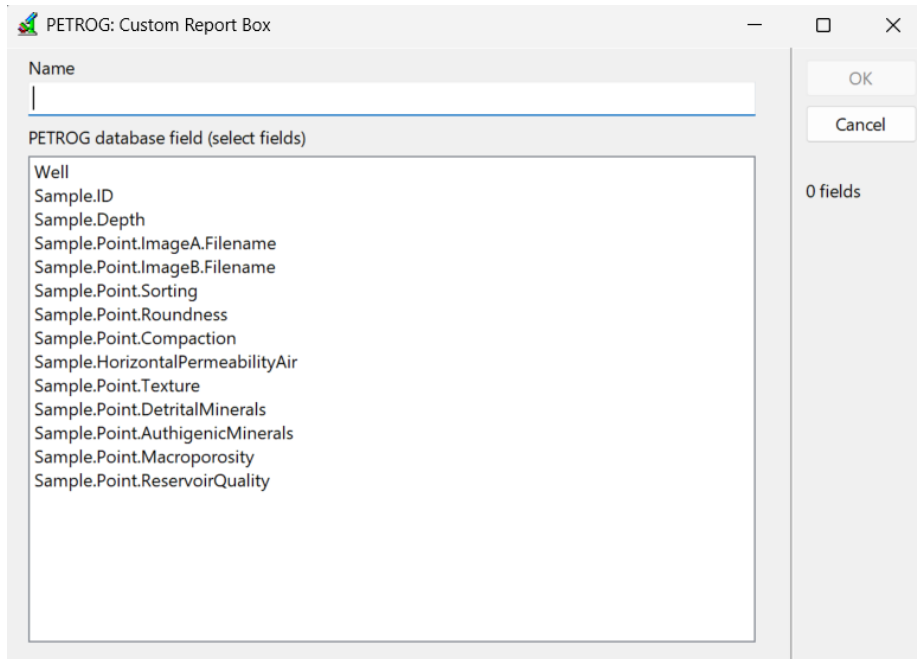


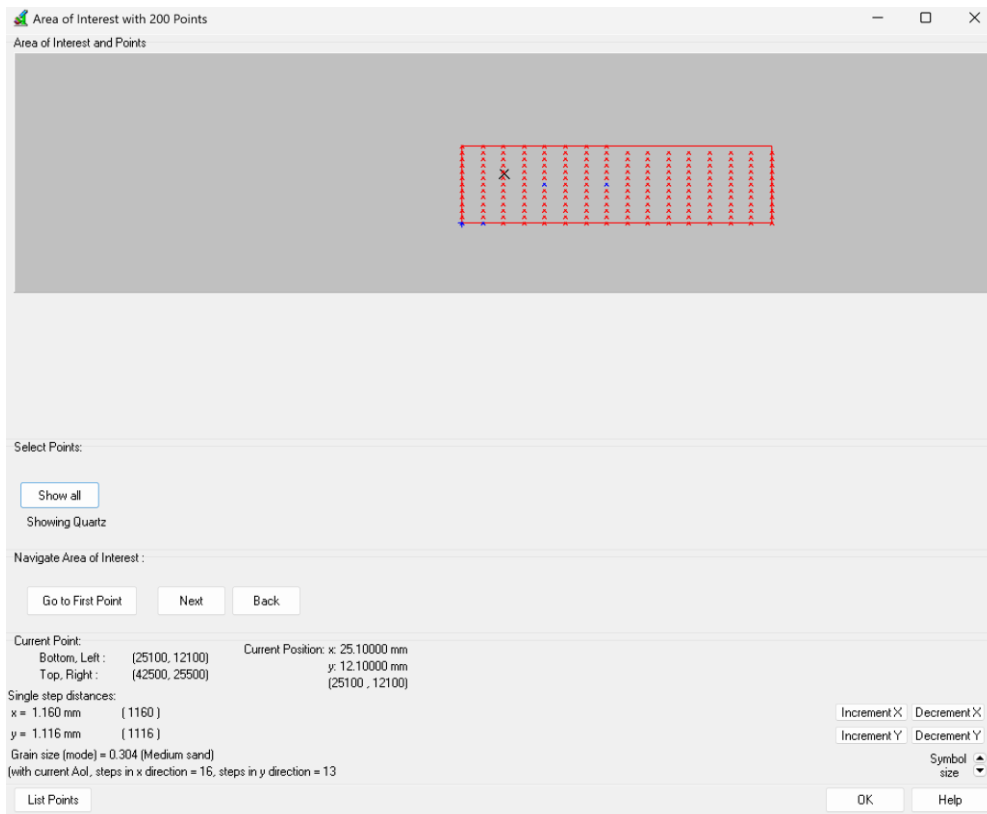
Report to Printer

New in this release is the option to generate customised reports, especially to PDF files. PETROG v5.2 compliments the existing Report to Word functionality, and generalises this so that a report can be sent directly to a printer, or print to file drivers such as "Microsoft Print to PDF". Reports can be configured with the Print Report Editor, that allows you to create a report template, define what data to include in the report, header/footer information, and select and place images in the report (i.e. photomicrographs collected during a point count).

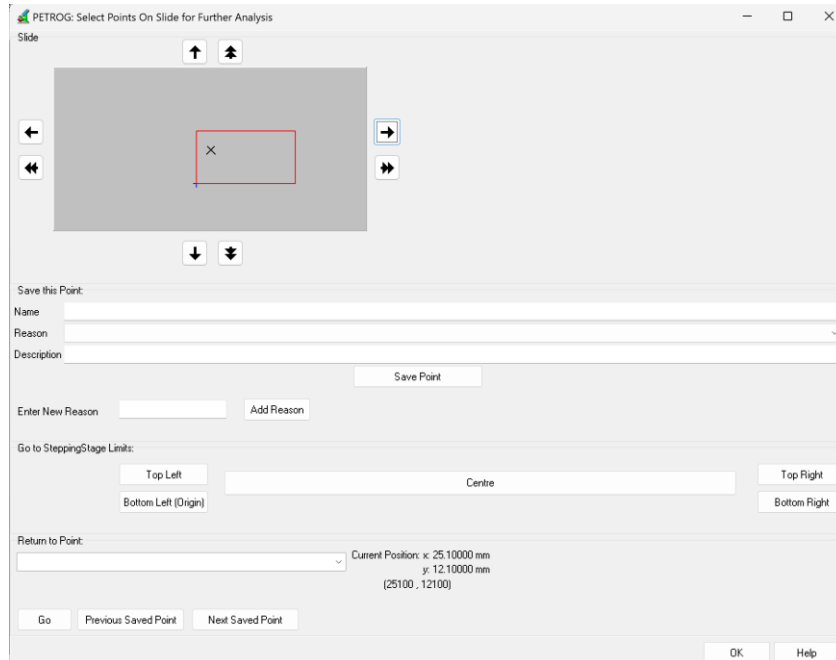


Revisit/Review Points, and Translate Aoi

After collecting point count data for a sample, you may wish to step back through only grains of a specific type. This can now be achieved with the new Review Selected Points feature, which can be used to sub-select the points in the Area of Interest (Aoi) by Class, so for instance you can choose to only show the Quartz grains:



There is also the new Revisit Selected Points option to define your own Points of Interest, saving these with a Name, Reason and Description:



Both of these options are more useful in conjunction with the new option to translate an Aoi from one microscope to another. So for instance, the SteppingStage could be mounted on an electron microscope, and then a mapping found between the existing Aoi (defined on the polarising microscope) by locating the same part of the slide that was previously at the bottom-left of the Aoi and translating the Aoi based on this. Then, if the electron microscope is made active in the PETROG Hardware Combination, then this translation will be automatically applied. Revisiting or Reviewing

Selected Points will then allow you to step through points of a specific type or defined Points of Interest, on the electron microscope.

PVK

New in PETROG v5 is the PETROG Virtual Keyboard (PVK). PVK works with existing Keyboard Mappings, and transforms these to 'touch keys' on a touchscreen device connected to your local network, to provide easier, faster, more accurate and more detailed data entry.

An existing Keyboard Mapping can be exported to a .pkm (PETROG Keyboard Mapping) file, which can be imported into the PVK Editor, creating a virtual keyboard. The keyboard layout can then be customised on to different tabs, and repositioned/sized/coloured in order to maximise productivity when using the PVK application (Windows or Android) for logging during a point count.

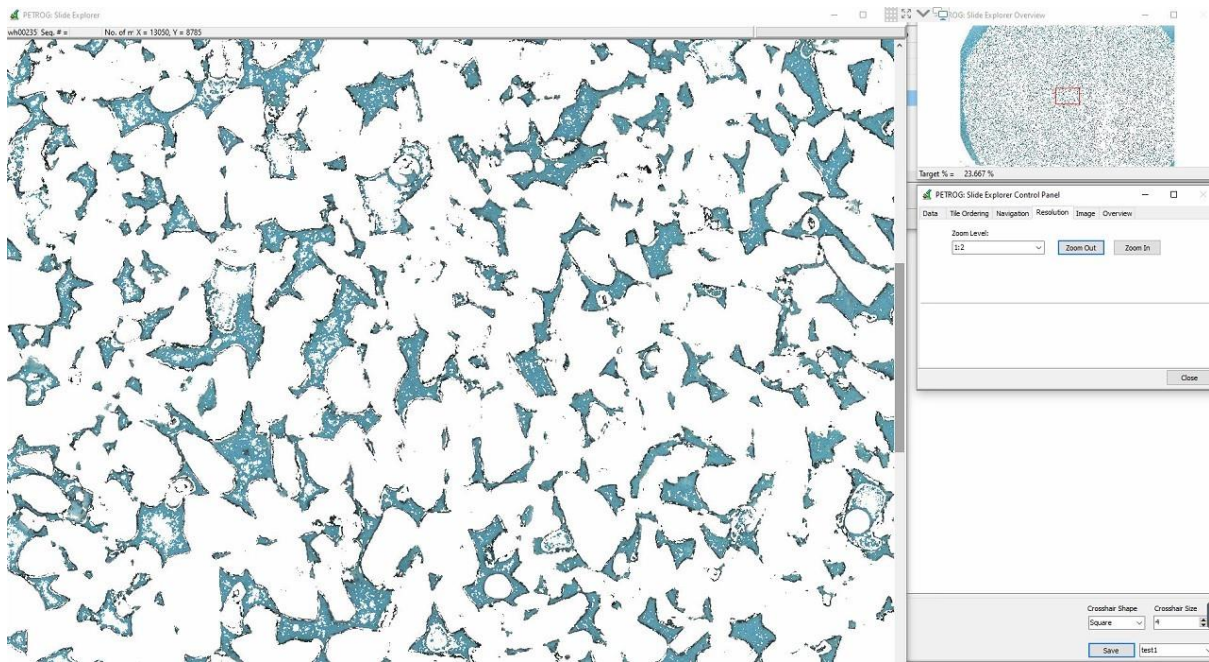
The screenshot shows a window titled "PETROG Virtual Keyboard Preview" with a tabbed interface. The "Interstitial" tab is selected. The keyboard layout consists of a grid of blue buttons with white text, representing different data styles. The buttons are arranged in a grid that is 8 rows high and 3 columns wide, with the last cell in the bottom row being empty.

Info	Alite	Belite	InternalPore	Interstitial
Ferrite	Ferrite - undifferentiated	Ferrite - dendritic		
Ferrite - lath form	Ferrite - blocky	Aluminate		
Aluminate - undifferentiated	Aluminate - cubic	Aluminate - prismatic		
Aluminate - proto-C3A	Free lime	Free lime - undifferentiated		
Free lime - in cluster	Free lime - scattered	Free lime - included in alite		
Free lime - adjacent to belite	Sulphate	Sulphate - undifferentiated		
Sulphate - alkali sulphate	Sulphate - calcium sulphate			

Example keyboard mapping files and PVK layouts are provided for each Data Style.

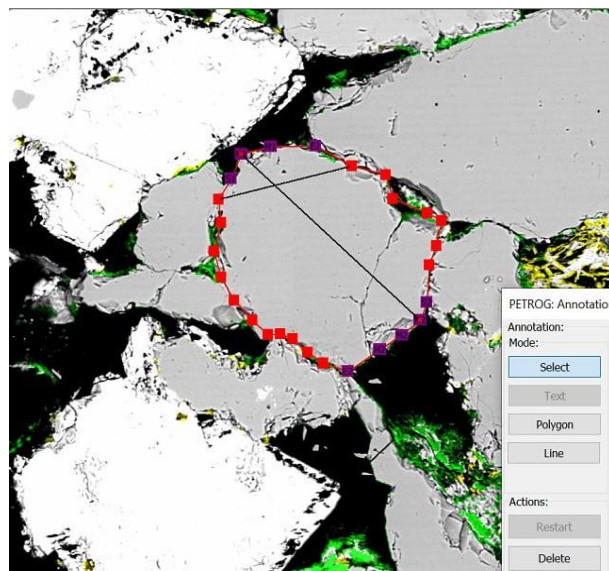
Colour Analysis

The new Colour Analysis Tool supercedes previous options for colour analysis in older versions. It is now possible to create an output layer (colour space data + option selection) manually from a single or virtual image, or use the existing point count data for a sample to generate the colour space data. An output layer can now be applied to a virtual image, and shows an estimated % of the target class for the entire virtual image:

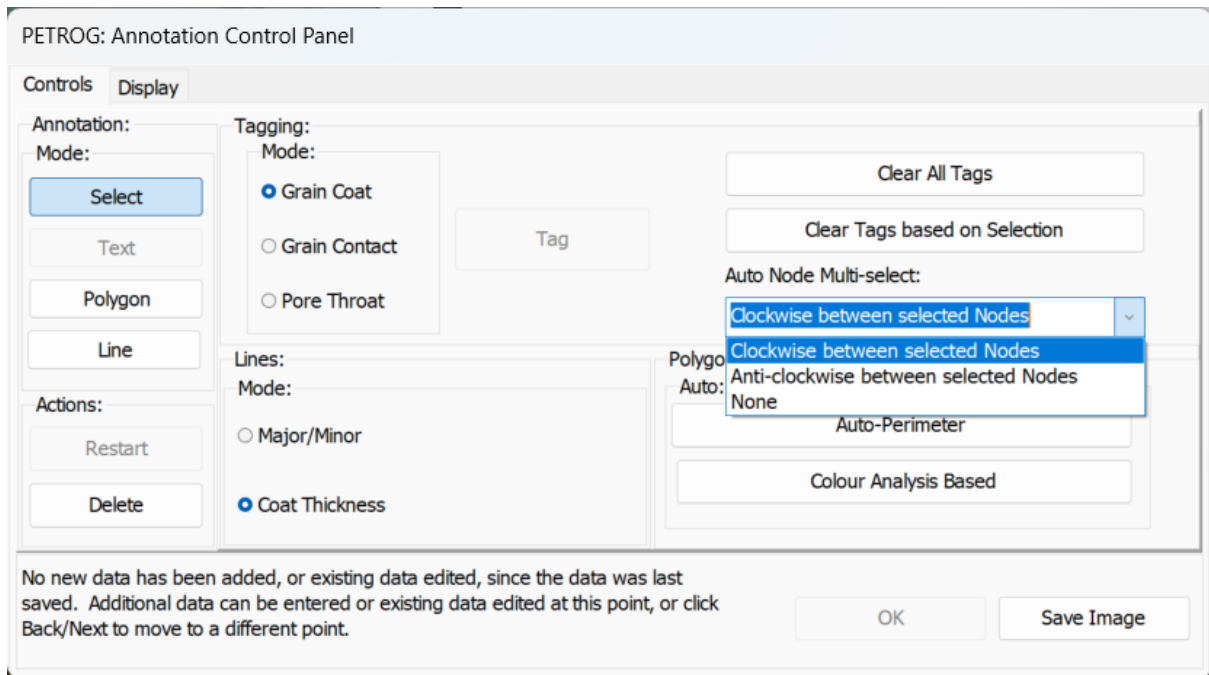


Grain coat coverage

The new 'Outline logging' mode allows advanced textural information to be collected when working with imported images (e.g. SEM images). There are options to digitise the perimeters of grains, and to then "tag" the nodes belonging to these perimeters, to indicate whether they represent grain contacts or grain coating. Average coat thickness measurements can also be taken. This data is used to automatically calculate and report on clay coat coverage values, such as the grain contacts %, grain coating %, and clay coat coverage percentage (as per Dutton et. al, 2018):



Updates in this version include a reorganisation of the options in the Annotation Control Panel. Node tagging now works differently – it is now possible to multi-select nodes (using the CTRL key) and then further nodes will automatically be selected dependent on the Auto Node Multi-select drop-down selection:



There is also summary text in the bottom panel of this window, acting in a similar way to the Logging Manager within point counting, which indicates whether data needs to be saved before moving to the next image.