



Data Mosaic software for exploration and mining

- Data Mosaic provides rapid, reliable interpretation of drill hole data.
- Designed by geologists for geologists, it provides a simple, intuitive interface for applying sophisticated mathematical and machine learning methods to your data.
- Incorporation of spatial information reduces misclassification and allows easy upscaling of results.
- Multiscale results provide geological information for generating 3D models at any scale - from large scale geology models down to detailed orebody models.

Data Mosaic is an advanced software solution which gives the exploration or mine geologist the ability to rapidly and accurately turn numerical drill hole data into useful geological information.

Rapid and consistent interpretation

Using automated methods, Data Mosaic provides consistent interpretation of numerical drill hole data, overcoming inconsistent subjectivity inherent in human interpretation of large and complex data sets.

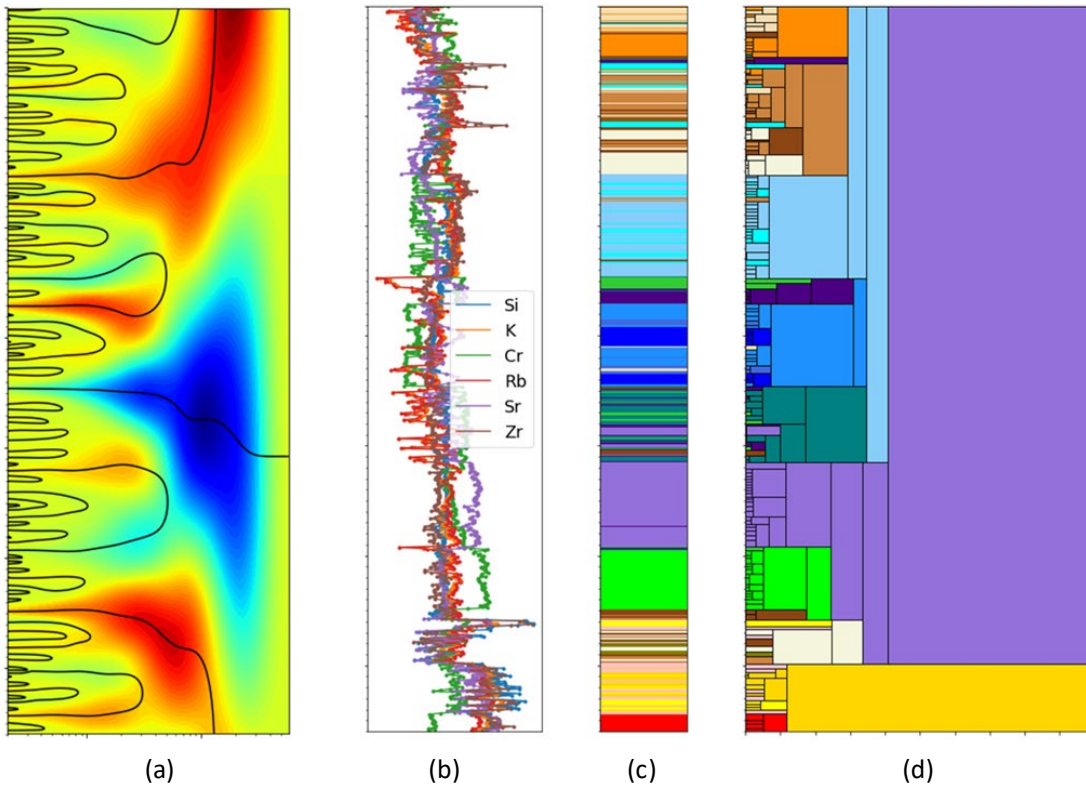
Data Mosaic can process large data sets in a matter of seconds or minutes, replacing human interpretation, which may take many weeks.

It uses an automated process controlled by the geologist so that their expert geological knowledge is incorporated into the workflow, resulting in geologically meaningful outputs targeted to solving deposit specific problems.

Accurate lithological boundary detection

Data Mosaic uses boundary detection algorithms adapted from established and reliable image analysis techniques; these provide accurate detection of lithological boundaries down hole.

The boundaries are used to segment the data stream into lithological units to which lithological classification is applied. This method overcomes noise and misclassification problems that result from applying machine learning to individual samples.



A wavelet transform (a) is applied to each variable (b) to provide multiscale analysis of data. Machine learning is applied to classify samples (c) and multiscale domains (d).

Multiscale spatial analysis for continuous upscaling

Geological interpretation is scale dependant. Data Mosaic uses the continuous wavelet transform to filter input data and provide multiscale results.

Machine learning techniques provide a single result at the scale of sampling. This can be very noisy and require substantial time-consuming post-processing by the geologist to upscale the data to be suitable for application, such as generating a 3D geology model.

Data Mosaic overcomes this problem by providing results at a continuous range of scales from sample scale to drill hole scale.

The geologist can inspect results and choose a scale suitable for their task and then export results at a consistent scale across the entire drill hole data base.

No black boxes

Our methods are published in international peer-reviewed journals, including several case studies. Please contact us for more information.

Try it now: web app and training

Data Mosaic is accessible through our web app. We can also provide bespoke solutions for your company.

We conduct comprehensive training courses for geologists. This equips participants with all the information they require to confidently use Data Mosaic to analyse their data sets.

Contact us for details.



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