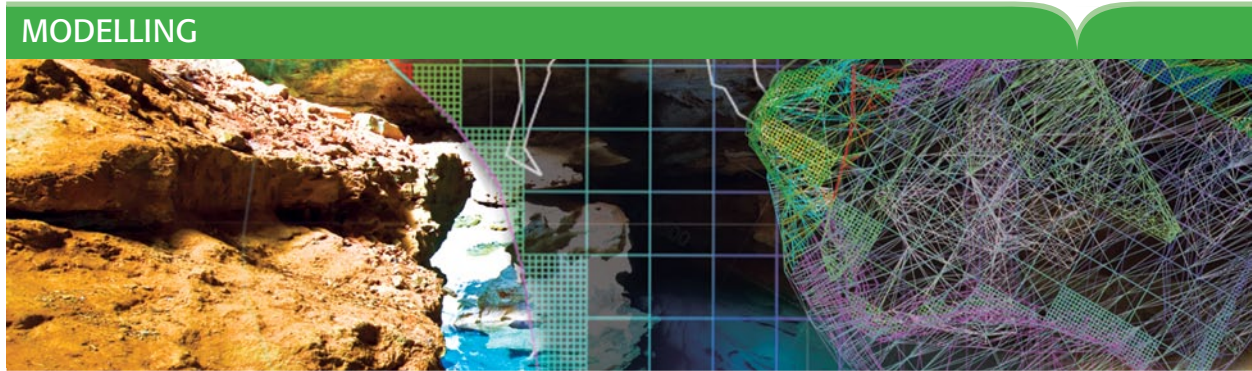


Modelling defines the geological model in space and thereby provides the framework or foundation on which the mineral resource model is constructed.



Modelling, particularly geological and volumetric, provides the skeleton or framework around which the quantification of a mineral resource is built. All variables used to define a resource are contained within the mineral resource model. In addition the immediate environment of the mineral resource can be included in the modelling (e.g. geotechnical, hydro-geological) to assist in mine optimisation, financial models and mineral reserve models.

GEOLOGICAL MODELLING

Modelling is the science of creating computerised representations of a mineral deposit using geological information obtained from borehole logging or the results of geophysics surveys. The geological model is defined and constrained by the understanding of the geological process and emplacement theory. Mineral resource modelling allows the formulation of a structural framework to facilitate identification of unique domains and allows visual interpretation of the deposit. Robust modelling includes the immediate environment of the deposit to assist in waste estimation as well as metallurgical, structural and other domaining.

WIREFRAMING

A wire frame represents the shape of a selected portion of a deposit in 3D and is a major interpretive step towards creating a geological model from the raw data. The wireframe is a way of representing solids and, simplistically, is generated by combining strings in sections through the deposit. Z* analysts are skilled in geological modelling and offer a range of modelling services using CAE™ (Datamine) and GEMSTM software. Z* believe that geological modelling must be undertaken together with the client who understands the deposit.

DOMAINING

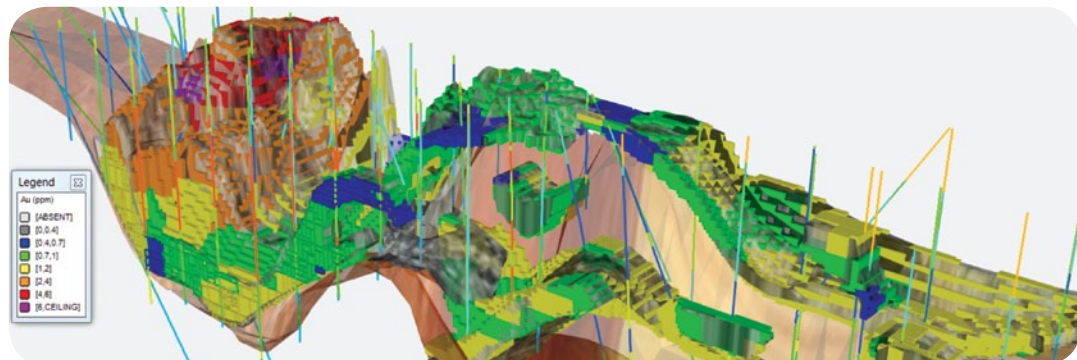
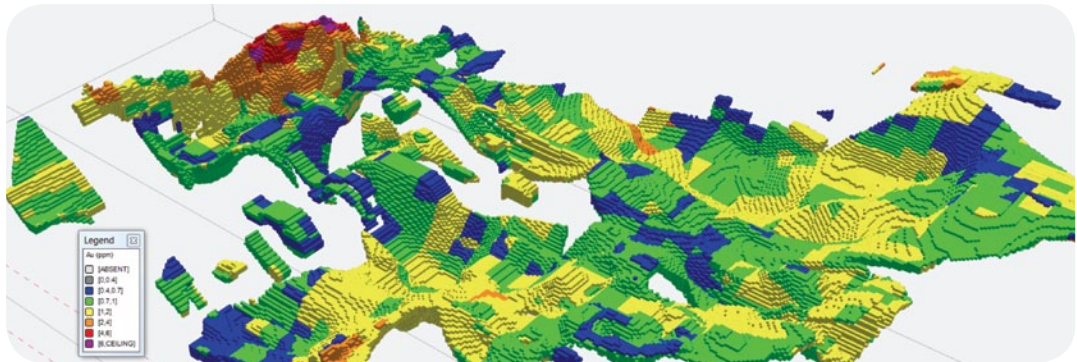
It is imperative that mineral resources are estimated in homogeneous zones that are typically defined by the geology. However, cognisance must also be given to the imprint of domaining on the associated variability in the grade data. A thorough understanding of this mineralisation model is key to accurate estimation of the mineral resource. Z* have extensive experience in applying interpolation solutions to refine geological boundaries.

BLOCK MODELS

Z*'s professional staff can create robust block models in 2D or 3D for open pit and underground mining to meet the clients needs. It is important to ensure that the size, shape and orientation of the block model is optimised and aligned to both the sampling information and the mineral resource estimation. Z* can create appropriate block models for all commodities designed specifically to meet the client's requirements.

ASSURANCE ON MODELS

Z* provide assurance on all types of modelling and can undertake independent 3rd party audits on mineral resource models and associated wireframing and block models.



Z Star provide robust assurance of mineral resource estimates and conduct risk analyses on existing mines or new projects. The company will undertake due diligence audits, resource performance analysis and provide governance advice.

Services include:

- comprehensive geostatistical estimation service
- mineral asset valuation
- Competent or Qualified Persons Reports
- classification of mineral resources
- size frequency distribution modelling
- geostatistical simulation
- sample optimisation
- data validation
- geological modelling
- statistical analysis

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