Resources Workflow is an integrated application in the Mining Edition of Isatis.neo, Geovariances’ new-generation software in geostatistics tailored for the Mining industry. The workflow offers the industry-standard in geostatistics for Mineral Resource Estimation and Simulation in a simplified and secure approach. It streamlines mineral resource and recoverable resource estimation.

Why Resources Workflow?

- **All-in-one workflow.** All the tools needed to perform data analysis, resource estimation and uncertainty analysis are merged into a single geostatistical workflow.

- **Ease of use.** Simplified access to geostatistics, even for non-experts. Fast workflow-based solution walking users through the estimation process, combined with powerful parallelized algorithms.

- **Testing made easy.** Easy definition of multiple estimation scenarios from different parameters.

- **Fast and safe model updating.** Automated workflow allowing a re-run of the whole estimation process with one mouse click, for daily, weekly or monthly estimate updates.

- **Smart resource reporting.** Flexible reporting facilities fully compliant with mining reporting codes’ requirements.

- **Rapid audit and desktop review.** Auditable and traceable estimation process to quickly verify if the estimates make sense and identify the main risk contributors.

For more information or to request a demo, visit www.geovariances.com
AN OPTIMIZED AND SIMPLIFIED WORKFLOW FOR MINERAL RESOURCE ESTIMATION, GRADE CONTROL AND RECONCILIATION

DATA HANDLING AND QUALITY CONTROL
– Analyze and validate input data through interactive and dynamically linked statistical representations (histograms, swath plots, cross plots).
– Achieve sample length regularization.
– Optimize the declustering window size.
– Perform structural analysis simultaneously on raw and Gaussian transformed grades.

RESOURCE ESTIMATION AND SIMULATIONS
– Automatically get well-fitted multivariate/multi-directional variogram models.
– Take into account support and information effects.
– Define nested neighborhoods. Optimize kriging neighborhood with Kriging Neighborhood Analysis.
– Estimate your resources at local scale with univariate or multivariate Ordinary Kriging.
– Estimate resources at global scale with Uniform Conditioning (UC), Localized Uniform Conditioning (LUC), either univariate or multivariate.
– Assess the risk associated to your estimates with Turning Bands conditional simulations and automated simulation post-processing.
– Control the quality of the estimates through various statistics: histograms, swath plots and cross plots between data and estimates.

RESOURCE REPORTING
– Report tonnage, metal, grade and/or benefit for each defined cutoff, by domain, below the topography or inside the pit.
– Define your own Resources Classification compliant with international codes and report your resources by category (Measured, Indicated and Inferred)
– Compute grade-tonnage curves.
– Produce your report and store your modeling parameters on the fly as your project progresses thanks to an integrated word processor.

RESOURCE MODEL UPDATING AND REVIEWING
– Save estimation workflows and related parameters and easily re-run them as new data come in.

GRADE CONTROL AND RECONCILIATION
– Quickly build and update short-term models from production data using variogram models and neighborhood parameters defined for the long-term estimate.
– Perform reconciliation between the short-term and the long-term model.
– Generate mining polygons based on multivariate criteria (grades, lithology, categorical variables).
– Easily assign a destination to the material (ore, waste, stockpile).

Resources Workflow is available into the Mining Edition of Isatis.neo.