Resources Workflow is an integrated application in the Mining Edition of Isatis.neo, Geovariances’ new-generation software in geostatistics tailored for the Mining industry. It offers the industry-standard in geostatistics for Mineral Resource Estimation and Simulation in a simplified and secure approach that 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.
- Reproduce estimation results. Review models in an effective way.

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.