

# CONSULTING SERVICES FOR THE MINING INDUSTRY

- Resource estimation
- Resource classification
- Risk analysis
- Drill hole spacing analysis
- Review of estimation projects

## PARTNER WITH US

From geological domain definition to workflow automation, Geovariances brings the best of geostatistical science and real-world mining expertise to your projects. Our team helps you translate data into value – and confidence in every decision.



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Our consultants deliver reliable, high-impact solutions built on deep software expertise and extensive industry experience. Applying best practices, they address complex challenges, select the right methods and tools to process data accurately, and build robust, secure models that support confident decision-making. Experienced in global reporting standards, they prepare independent technical reports across jurisdictions. Recognized experts in their fields, they understand your business, share their knowledge through international conferences and publications, and ensure every project reflects the latest scientific and industry standards.

## OUR CORE CAPABILITIES

### Geological Domain Definition with Machine Learning

By combining multivariate geostatistics and machine learning, we deliver **deeper insights that reveal meaningful patterns** in your data.



## Mineral Resource Estimation & Classification

We use advanced geostatistics to **interpret and model orebody geology**, **estimate and classify resources**, and deliver **reliable**, **reporting-compliant models** that meet global standards.



#### **Recoverable Resource Estimation**

Through non-linear geostatistics, we estimate **recoverable tonnage**, **metal content**, **and grades above cut-offs**, delivering insight into the **technically and economically extractable potential** of your deposit.



### **Grade Uncertainty & Risk Analysis**

Through conditional simulations, cut-off-based risk analysis, and multivariate modeling, we evaluate **local and global grade uncertainty** to **improve reconciliation** and **make data-driven production decisions**.



#### **Drill-Hole Spacing Analysis**

Using simulations, we analyze the impact of drill spacing on **model** uncertainty and resource confidence. You gain optimized drilling plans, greater classification accuracy, and better budget efficiency.



## Optimization of Short- and Long-Term Models

We combine short- and long-term data, including blast-hole information, to extract maximum value from your dataset and deliver **stronger**, **more consistent resource models**.





## WORKFLOW INTEGRATION & AUTOMATION

#### **Workflow Customization & Automation**

We review your current processes and implement Python-based automation in Isatis.neo. You gain a workflow fully tuned to your needs, faster model updates and a minimized manual effort.



#### **Conversion of Estimation Routines**

We adapt your existing workflows from Isatis or other software to Isatis.neo using batch and scripting capabilities. You obtain automated, reproducible routines fully integrated into your process.



## TECHNOLOGY & EXPERTISE COMBINED



Our consultants work with Geovariances' Isatis.neo, the industry's most comprehensive and advanced geostatistics software solution. Trusted worldwide for its scientific excellence and innovative workflows, Isatis.neo streamlines the entire resource workflow– from data preparation to complex simulations – enabling geoscientists to deliver accurate, auditable resource estimates and risk-based analyses.

#### What our clients say

"Each time, we enjoyed Geovariances' great service and support. Their consultants are very professional and flexible."

— Eramet

"Exploring or exploiting a deposit today cannot be optimal without geostatistics. Geovariances has conducted several high-quality studies for Kazzinc."

— Independant Consultant





### WHO WE ARE

Geovariances is a global leader in advanced geostatistics for the mining industry. Since 1986, the company has supported mining organizations worldwide in improving resource evaluation, reducing geological uncertainty, and making confident, risk-informed decisions. In partnership with the Center of Geosciences at the Paris School of Mines – the birthplace of geostatistics – Geovariances combines scientific rigor, innovative technology, and decades of field experience to deliver reliable, data-driven insights for every stage of the mining value chain.

Geovariances is a **Datamine company**.

## CONTACT US



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