



# Geovariances Training

## ISATIS ESSENTIALS

### 3-day course

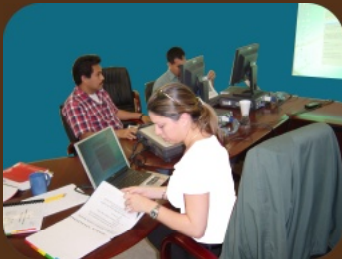
Geovariances offers a complete set of high quality training programs in mining geostatistics for beginners and experienced users.

Geovariances courses cover basic and advanced Geostatistics and provide participants with plenty of hands-on practice with real mining data.

All courses are led by our highly experienced consultants.

Geovariances offers public courses around the world and throughout the year in English, French and Spanish.

Our consultants also provide in-house training and mentoring focused on your own needs.



Isatis, the geostatistical software solution from Geovariances, is regarded as the reference in mining geostatistics.

Leading mining and consulting companies around the world rely on Geovariances and Isatis for genuine expertise in Geostatistics.

### Objective

Isatis provides a complete set of geostatistical tools and powerful 3-D graphics for analysing, interpreting and modeling your data. This course will teach you how to use Isatis for the essential tasks in Mining Geostatistics.

### Features

- This course is based on practical exercises using Isatis and real mining data
- Taught by experienced practitioners
- Course materials (documentation, journal files, training data, worked examples) for use in your work place

### Who should attend

This course is aimed at geologists, engineers and others seeking a comprehensive overview of the essential geostatistics tools available in Isatis.

### Course contents

Overview of Isatis tools and concepts

- User interface and data management
- Data regularisation, de-clustering, flagging and selecting
- Working with block models
- 3-D viewer
- Batch capabilities with journal files

Data analysis

- Classical statistics and analysis tools
- Computing experimental variograms, maps and clouds
- Variogram modelling

Estimation

- Neighbourhood analysis
- Ordinary Kriging
- Evaluating the results
- Introduction to simulations

### Prerequisites

A basic knowledge of variography and kriging is assumed.

The **Data Analysis and Resource Estimation** course covers the fundamental concepts of geostatistics and provides an ideal basis for **Isatis Essentials**. To extend your knowledge we recommend that you also attend the **Isatis Advanced** course which covers non-linear techniques.

### On-line registration

<http://www.geovariances.com/en/mining-isatis-essentials-co252>



# Geovariances Training

## ISATIS ADVANCED

2-day course

### Our trainers

#### James Pocoe Senior Resource Geologist

James is a geologist from Australia with experience in mining, evaluation and exploration projects. He completed the CFSG mining geostatistics course at Centre de Géostatistique de l'Ecole des Mines de Paris in June 2009. James brings to Geovariances substantial site-based, hands-on mining industry experience in uranium, gold, base metals and iron ore. His strengths are in ore body interpretation and modelling, geostatistical analysis, estimation, model validation and resource reporting.

#### Javier Miranda Senior Resource Geologist

Javier is a geologist with experience in mineral exploration and natural processes modelling. After graduating from the National University of Colombia Bogota in 2002 Javier joined EAFIT University where he worked as a researcher in geostatistical studies focusing on natural processes modelling until 2004. Javier joined BHP-Billiton in 2004 as an exploration geologist, where he applied geostatistics for resource estimation in several projects in South America.

### Objective

Take advantage of your data using the non-linear geostatistical tools in **Isatis** to address common mining issues. This course will teach you how to perform global and local recoverable resource estimation and simulations for risk assessment using **Isatis**.

The course focuses on three techniques:

- Uniform Conditioning by kriged panel grade
- Indicator Kriging with affine correction
- Conditional Simulations

### Features

- This course is based on practical exercises using **Isatis** and real mining data
- Develop techniques and work flows for implementation of non-linear techniques
- Taught by experienced practitioners
- Course materials (documentation, journal files, training data, worked examples) for use in your work place

### Who should attend

This course is aimed at geologists, engineers and others wishing to perform recoverable resource estimations and simulations with **Isatis**.

### Course contents

- Indicator pre- and post-processing
- Indicator variography and modelling
- Indicator Kriging and change of support by affine correction
- Gaussian transformation
- Uniform Conditioning by kriged panel grade
- Conditional simulations (turning bands, SGS)
- Post-processing
- Confidence interval computation

### Prerequisites

A basic knowledge of linear and non-linear concepts is assumed.

The **Data Analysis and Resource Estimation** course covers the fundamental concepts of geostatistics and provides an ideal basis for **Isatis Advanced**.

### On-line registration

<http://www.geovariances.com/en/mining-isatis-advanced-co255>

### Contact

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