



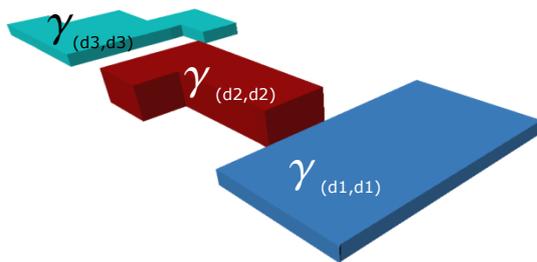
What's new in ISATIS 2016?

The latest Isatis release offers innovations allowing the mining engineer to anticipate production variability between different orebody areas or the oil reservoir modeller to get a more realistic geological model when dealing with turbiditic environments. Overall, Isatis 2016 provides users with additional tools to help them get even more precise models.

Isatis 2016 improves output analysis

Giving clues for anticipating mine production variability

The new **Product Variability** functionality allows anticipating and comparing **the production variability between zones** through the average value of the variogram function. The variability is computed over different supports: SMUs, exploitation panels or groups of panels.



Improving Simulation Reduction

The objective of this functionality first released in Isatis 2015 is to be able to **evaluate projects using a representative subset of simulations** selected among a larger set, each realization being associated to a probability of occurrence.

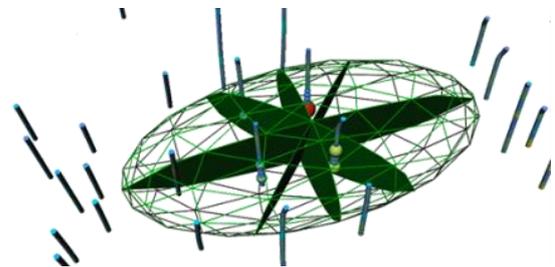
It now handles **multivariate datasets** (up to 50 secondary variables). You may also attach a **weight** to the different variables and reports **metrics** between realizations.

Isatis 2016 refines models

Helping in the choice of neighbourhood relevant parameters

The new **Neighborhood Statistics** allows collecting various statistics about neighbors and to store them in variables for further use. They include statistics about neighbor values, the number of selected neighbors per sector, the number of empty sectors, the quantiles and statistics on neighbor values, on the

distances between the targets and the selected neighbors, etc.



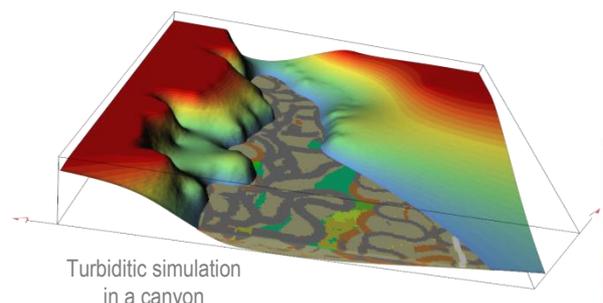
Enabling different support size data integration in the estimation

The new **Mixed Support Kriging Pre-processing** allows integrating various support size data in kriging. The application computes the multi-support variance representing the dispersion variance of the sample support in the block. This variance is an input parameter of **Kriging with Variance of Measurement Error**.

Up to 50 support sizes may be taken into account, including drillholes, blasthole, grade control support.

Allowing the simulation of turbiditic environments

Flumy now simulate **turbiditic depositional systems** within a canyon and the related **specific lithotypes**. It **simplifies parameter setting** through a non-expert mode asking for a reduced number of parameter values.



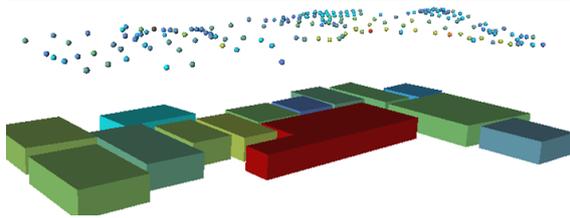
Transferring auxiliary attributes

The **Discretization & Flattening** tool now offers to transfer auxiliary attributes from the structural grid to the stratigraphic grid in order to use them as auxiliary information for estimation or simulation purposes.

Isatis 2016 improves data handling

Facilitating data manipulation between files

- **Polygon variables** can be copied to Points Files.



- **Copy Statistics** now offers to compute quantiles.
- **Migrate functions** now enables the transfer of macrovariables and alphanumeric variables between files.

Improving data exchange

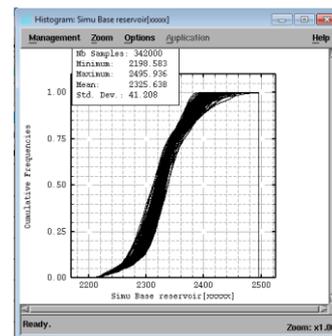
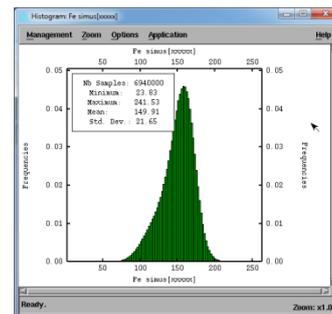
- The new **Handvel import/export interfaces** allow exchanging velocity grids between Gocad™ and Isatis. Handled formats: HANDVEL, VFUNC and XYVFUNC.
- The new **Convert Point File into Core Lines** allows converting drillhole data imported from ASCII or Excel files as points into **core lines** since the coordinates of the beginning and end of cores are known.
- **Fault Editor** can now load 3D fault geometries from *wireframes* (DXF format).
- The **Datamine interface** allows exporting **alphanumeric** variables to Datamine block models (e.g. domains, lithology codes, etc.).



Isatis 2016 simplifies software use

- The **variogram map** calculation parameters can now be stored together with the calculation parameters of the individual directions in a parameter file and reload later to set a default configuration.

- **Variogram fitting** is simpler to use with the the default loading of the model which has been calculated in a previous run.
- It also offers to **automatically correct the covariance matrix** when reported invalid.
- With **Quick Statistics**, you can now get in a click the **histogram of each realization** in one graphic and **global statistics** on all realizations at the same time.



- **Gaussian to Raw Variogram** computes new outputs: raw experimental variogram and raw model

Isatis 2016 goes quicker

Local Parameter Modeling computation time has been **divided by 10** for grid data.

Isatis 2016 improves display

- The default palette list has been enriched with **robust to colorblindness and grey scale printing, perceptually uniform palettes**: Viridis, Plasma, Inferno and Magma.
- It is now possible to create **automatic logarithmic color scale**.
- Metafile graphic files can now be merged in a click and superimposed in a single new graphic file.