Release Notes

Supervisor v8.14.1.1

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WHAT'S NEW FOR SUPERVISOR V8.14

Supervisor provides a range of univariate and multivariate data analysis tools that allow users to rapidly understand the characteristics of their orebody. Supervisor's broad suite of components are an invaluable tool for resource estimation professionals and provide simple, intuitive interfaces for common and advanced geostatistical techniques alike. Employing the advanced local and global estimation optimisations allow users from all ends of the resource industry to manage their deposit with the highest level of confidence. The flexibility of Supervisor's import and export features allow users to enjoy the benefits of a comprehensive, easy-to-use geostatistical package regardless of their preference of general mining software.

This is a **minor version** update for Supervisor. It presents a brand-new component, Multivariate Conditional Simulation, which allows users to generate simulations for datasets with multiple variables simultaneously and reproduce the spatial and statistical correlations between them.

What's New in Supervisor v8.14?
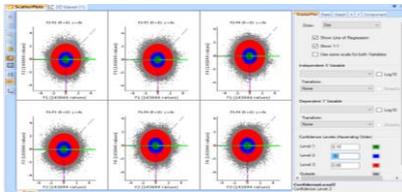
New!! Multivariate Conditional Simulation

The multivariate conditional simulation component allows users to perform conditional sequential gaussian simulation over multiple variables while maintaining complex compositional correlations.

In particular, this feature allows practitioners in the multivariate space to perform detailed risk analysis studies on their deposit over all elements of interest simultaneously.

The feature rich workflow allows for multiple compositional and gaussian transformation techniques with automated data handling and validation plot generation to ensure robust results for all data types.
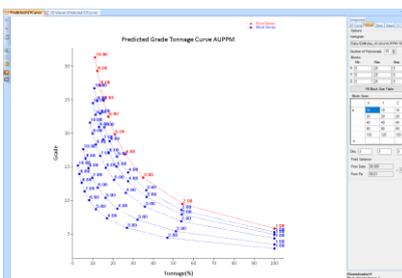
New!! Feature enhancements

- Multiple GCoS Grade Tonnage Curves can be displayed at once on the Predicted Grade Tonnage Curve component.

- The theoretical grade tonnage curve can now be displayed on the Conditional Simulation Grade Tonnage Curve component.

- The Conditional Simulation QQ plot can now be filtered by domain.

INSTALLING THIS UPDATE

This version of Supervisor can either be installed as a fresh installation or as an upgrade directly over a previous version.

There is no need to uninstall a previous version of Supervisor.

1. Download the latest version of the beta installation executable.

2. Run the installer and proceed through the menus.

3. Once the installer has completed and the window has been closed, run the Supervisor executable to launch the program.

Utilising the Multivariate Conditional Simulation Component

The Multivariate simulation component can be added to the Domain node of Point data that has been grouped by Domain/Assay.

The input data requires multiple correlated assays as these relationships will be reproduced in the results of the process. If there is weak or no correlation between the input assays then the process will produce sub-optimal results

When running the process for the first time, it is recommended to use an ALR compositional transformation and utilise the GPCA multivariate normal transformation with the default settings. Please note that for the compositional transformation, the compositional value should be set appropriately for the assay units. (ie. For assays in %, use 100. For Assays in ppm, use 1000000)

The second part of the multivariate process is the same as the conditional simulation process except that the process uses the Factor assays. Once the variography for the Factors has been completed, the multivariate simulation process can be run which will process all the necessary simulations and apply the relevant back transformations.

The results tables and components will then be presented for validation purposes.

More detailed notes on the component features are laid out in the updated help documentation within Supervisor.

MORE INFORMATION

The following general resources are available to help you use your product:

- **Integrated Help Files**: your product help file is your first stop for assistance and contains a wealth of information, including the latest information about this version.

- **Online video tutorials**: check out our Youtube channel for video tutorials for step-by-step guides to some of our more complex features.

  https://www.youtube.com/channel/UCegit2FWNIuR39SVGEXNClw

- **Support Portal**: The Datamine Support Portal allows you to get in touch with our global support teams for direct assistance with any software related issues.

  https://datamine.freshdesk.com/en/support/login

- **Latest version**: The latest 8.14 release version can be downloaded using the following links:

  o **Datamine License:** via the Software Portal

  o **SAMS License:** via https://my.snowdenonline.com.au/

RELEASE NOTES – Supervisor v8.14.1

 A new feature

 An improvement or a minor feature

 A bug fix

The following cases have been resolved since the last released version of Supervisor:

For more information on individual cases, please refer to your online help, or contact your local support representative.

Multivariate Simulation

ID	Type	Description
S8-167		Compositional and Multivariate Normal transformations
S8-190		Gaussian results for Factors
S8-201		Custom Scatterplots for Factor comparisons
S8-127		Detailed progress updates
S8-205		Multivariate Simulation back transformed results
S8-166		Multivariate Simulation results export
S8-287		Custom Model Validation component for Multivariate Simulation results

Predicted Grade Tonnage Curve

ID	Type	Description
S8-211		Multiple curves can now be displayed at once for various block sizes
S8-290		Individual curves can be selected and other curves will fade out

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Conditional Simulation

ID	Type	Description
S8-292		A Domain filter dropdown box has been added to the point results QQ plot
S8-197		A Theoretical Grade Tonnage Curve can now be displayed on the GT Curve component
S8-324		The node definition extents can now be visualised in the 3D window as a wireframe box
S8-337		The aspect ratio for Probability Plots is no longer forced to 1:1 and will be displayed as the original ratio

Other components

ID	Type	Description
S8-187		A Total statistic has ben added (This is the sum of all values in the assay)
S8-274		Guidelines can now be toggled on for the scatterplot to enhance identification of point values
S8-314		Copying Model Validation components now also copies model details
S8-299		The Contact Analysis selection method has been redesigned as a matrix
S8-349/351		The Global Topcut Analysis tool has been redesigned to allow for easier interpretation and understanding of the output statistics
S8-363		Log-scale can now be enabled when modelling Upper and Lower Tail Models
S8-323		BiGaussian values are now selectable as a display for Variogram plots
S8-281		Boxplots can now display the points which inform the plot as an overlay
S8-283		The Model Validation statistical comparison tables will now display a combined table if multiple tables are selected at once

User Interface

ID	Type	Description
S8-273		Window pup-ups will now always appear on the same screen as Supervisor is active in

Bug Fixes

ID	Type	Description
S8-7	🚩	Boxplots now honour user defined names
S8-19	🚩	Corrected spelling error in GCoS
S8-20	🚩	Fixed an issue where the Create from Block Model option would fail in the Conditional Simulation component if the block size was missing
S8-22	🚩	Fixed an issue where the GCoS function within the Model Validation component would not function if the Declustering component was higher in the tree than its parent
S8-59	🚩	Fixed an issue where the Drillhole Spacing Analysis was not displaying values
S8-279	🚩	Fixed an issue with the Conditional Simulation component producing an error when the block model file has missing domain values
S8-282	🚩	Fixed an issue with the Boxplot's additional whiskers not functioning correctly
S8-288	🚩	Fixed an issue with the Probability Plot's Colour Key options not functioning correctly
S8-289	🚩	Fixed an issue with the DHSA not displaying the KNA block centroids in 3D
S8-291	🚩	Fixed an issue with the tooltips in the Grade Tonnage Curves not displaying correctly
S8-310	🚩	Fixed several issues with the Conditional Simulation component which presented errors
S8-309	🚩	Fixed a crash that occurred when selecting certain components in the Options tree
S8-315	🚩	Fixed an error in the Conditional Simulation component when using Assign Data to Node on a 2D dataset
S8-319	🚩	Fixed an issue with the Upper Tail Model not resetting to the correct view
S8-328	🚩	Fixed an issue where the Component Lock checkbox was not locking the component correctly
S8-330	🚩	Fixed an issue where the DHSA incorrectly prompts the Predicted GT Curve to be updated
S8-356	🚩	Fixed an issue where the LKNO component could be manipulated to cause a crash
S8-317	🚩	Fixed an issue where scatterplots would draw outside their boundaries
S8-318	🚩	Fixed an issue where boxplots would draw outside their boundaries

S8-354		Fixed an issue where the Reblocking process in the Conditional Simulation component would not complete
S8-365		Fixed an issue with the Cross Validation component where it would not automatically update when required
S8-352		Fixed an issue with the drawing of the Tail Models